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TRAIL & LANDSCAPE

A Publication Concerned With Natural History and Conservation

The Ottawa Field-Naturalists' Club

TRAIL & LANDSCAPE

The Ottawa Field-Naturalists' Club

– Founded 1879 –

President
Jeff Harrison

Objectives of the Club: To promote the appreciation, preservation and conservation of Canada's natural heritage; to encourage investigation and publish the results of research in all fields of natural history and to diffuse information on these fields as widely as possible; to support and co-operate with organizations engaged in preserving, maintaining or restoring environments of high quality for living things.

Club Publications: THE CANADIAN FIELD-NATURALIST, a quarterly devoted to reporting research in all fields of natural history relevant to Canada, and TRAIL & LANDSCAPE, a quarterly providing articles on the natural history of the Ottawa Valley and on Club activities.

Field Trips, Lectures and other natural history activities are arranged for local members; see "Coming Events" in this issue.

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VOLUME 23, NUMBER 2

Welcome, New Members - - - - - - - - - 42

Trail & Landscape Circulation - - - - - - - 42

The 110th Annual Business Meeting - - - - - - 43
Bill Gummer

From a Naturalist's Notebook . April - - - - - 45
Leanne Kane

Illustrated Guide to Some Hornworts, Liverworts and Mosses of Eastern Canada - - - - - - 48

Sticky Groundsel (*Senecio viscosus*) in the Ottawa District - - - - - - - - - - - 50
Daniel F. Brunton

An "Under the Birdfeeder" Flora - - - - - - 52
Albert W. Dugal

"A New World of Interest" - - - - - - - - 54
J.W. (Jack) Holliday

Tree Feather / Robert W. Nero - - - - - - - 55

Fall Bird Sightings - - - - - - - - - - 56
Tony Beck

Unexpected Blessing / Robert W. Nero - - - - - 64

The Woodcock's Display Ritual - - - - - - - 65
Roy John

1988 Peregrine Falcon Release Project in Ottawa - 66
Chris Ellingwood

The Ottawa Valley Spring Roundup 1988 - - - - - 72
Tony Beck

Mink Frogs in Lanark County, Ontario - - - - - 78
Louis L'Arrivée

University of Ottawa Spring Courses - - - - - 90

Coming Events - - - - - - - - - - - - 91

Welcome, New Members

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January 1989

Eileen Evans,
Chairman,
Membership Committee.

Trail & Landscape Circulation

Circulation of the January - March issue was as follows: a total of 1088 copies was mailed, 1064 of them to members, subscribing libraries and other institutions in Canada. Twenty-four copies were sent outside Canada, 19 of them to the United States. The cost of mailing that 40-page issue was $75.11.

The 110th Annual Business Meeting

Bill Gummer

The 110th Annual Business Meeting of the Club was held on January 10th at the National Museum of Natural Sciences.

The Club's finances are in a good state, and this is due in large part to the success of *The Canadian Field-Naturalist*. A number of COSEWIC reports were published, and revenue from reprints exceeded $13,000. Income from membership was also up, in spite of a small drop in numbers. Excess income over expenses reached more than $12,000.

Some of the highlights from the Committee reports, read at the meeting, are as follows.

The Birds Committee's participation, led by Marg Benson, in the Canadian Wildlife Service's Peregrine Falcon Release Program involved not only many active birders but also a number of people from the general Club membership.

The Conservation Committee was able to meet with Ministry of Natural Resources representatives on two occasions, providing opportunities to air Club concerns and to hear Ministry plans for resource management.

The Education and Publicity Committee, through the work of Barb Durochers and Deirdre Furlong, now has a modern exhibition rack, much better in appearance and accepting quick changes in exhibits.

For Excursions and Lectures, the high point of the year was the Grand Manan trip - nine days, 40 members, and able leaders Roy John and Colin Gaskell made this an event that is still talked about.

The Macoun Field Club has divided the leadership load more usefully, reducing the onus on individuals and giving all a turn at full responsibility.

The Membership Committee estimates total Club membership at just over 1,500; local membership went up by 26 from 1987 figures, to 851. New Members night was successful, with about 90 people present.

The Publications Committee had an interesting year. In addition to changes to *Trail & Landscape*, now quarterly and with new covers, *The Canadian Field-Naturalist* changed format slightly (and in so doing effected a saving in production costs), and its editor, Francis Cook, has now presided over more pages of the journal than any previous editor. D.F. Brunton's book, *Nature and Natural Areas in Canada's Capital*, was published by *The Ottawa Citizen*, with joint copyright with The Ottawa Field-Naturalists' Club. After costs are met, the Club will receive profits for conservation use. *Lichens of the Ottawa Region* by Dr. I. Brodo became the Club's third special publication.

The Council has had quite a turnover in personnel during 1988. Several resignations during the year were accepted with regret: Dan Brunton, Frank Valentine, Paul Ward and Kathleen Conlan. Others left at year's end: Barbara Campbell, Barb Durochers, Peter Hall, Wright Smith, Peter Croal and Shane Jordan.

THE 1989 COUNCIL

President	Jeff Harrison	(230-5968)
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Catherine O'Keefe
Frank Pope
Karen Richter
Austin Taverner.

The names of the new members appear in boldface.

A complete account of this Annual Business Meeting will appear in a future issue of the Club's official journal, *The Canadian Field-Naturalist*. ¤

From a Naturalist's Notebook. April

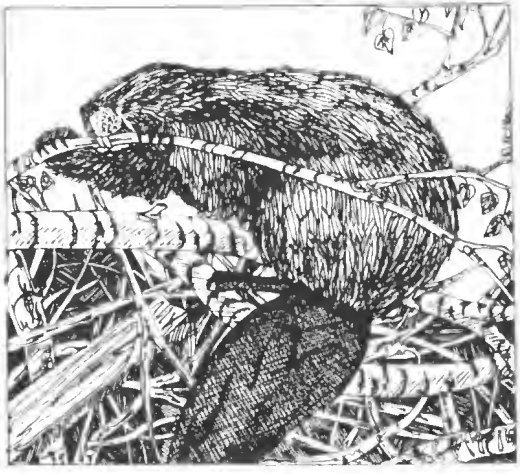
Leanne Kane
Rideau Valley Conservation Authority
Box 599, Manotick, Ontario KOA 2NO

April is the month I most look forward to at the Baxter Conservation Area. The Rideau Valley Conservation Authority's 68 hectares of Rideau River flood plain is very wet in spring. April is the one month of the year when the park is not full of noisy school children. April is the month when I have time to explore the park without trailing 25 school children behind. April is the month when I have time to really listen and to look without distractions. April is the month when I have the solitude that rejuvenates and prepares me for the busy conservation education program ahead.

There is much to see and hear at Baxter in April. The conservation area includes a long river frontage and the Baxter Marsh. It is a great place to see migrating waterfowl. From the lookout over the marsh, I can see Buffleheads, Common Mergansers and Mallards.

One day in early April as I was observing the waterfowl, an Osprey flew over the lookout, its white belly and black wrist marks clearly visible. A few days later, from the same lookout, I saw a young Beaver swimming into the marsh. This Beaver undoubtedly emerged from a burrow somewhere in the river bank near the marsh. Aspens are not abundant at Baxter, but Beaver can survive on willows, alder and water plants.

The wet soil at Baxter is perfect for Speckled Alder. They grow in the areas that used to be open fields. There are still remnants of the cedar fences that enclosed the fields. These shallow-rooted trees have root swellings inhabited by bacteria that can convert atmospheric nitrogen into compounds which the plant can use. These compounds are released into the soil when the tree dies. In this way, alders contribute to soil fertility.



The male catkins that have been on the alders all winter long have started to lengthen, and many are ripe

with pollen. When I walk through the woodlot forest, I find other trees that have flowers that mature before the leaves appear. Among these are White and Yellow Birch, Blue Beech, Ironwood, White Ash and Red Maple.

Between walks, I must return to my desk to catch up on paper work, alas. From my office window, I can see a corner of the pond. There is a resident pair of Mallards that visit the pond when there is no one around. I can also see the open field and at various times of the day a dozen American Robins searching for food in it. There are also Killdeer nesting in the field. The Killdeer is a great actor and has perfected the broken wing display that draws attention away from its nest.

Directly in front of my window is a double row of cedar trees. I keep the bird feeder there full and also scatter seeds on the ground. The cedars are full of unseen birds that descend to feed when the coast is clear. The seeds have attracted a flock of Dark-eyed Juncos. They are joined by three or four American Tree Sparrows. The juncos are recent arrivals, but the tree sparrows have been at Baxter all winter. They will be leaving soon for northern breeding grounds.

A major surprise this April is a visit from a Pileated Woodpecker to the dead ash almost directly in front of my window. This crow-sized black and white woodpecker has a very conspicuous red crest. It is very active in the woodlot. The long rectangular holes it excavates, often in dead elms, are mute evidence of its year-long presence here. This woodpecker is very shy, however, and rarely seen.

I've heard the Wood Frogs clucking from forest puddles daily since early April. Towards the end of April, I decide to return to the park after supper to learn what other animals are active during early spring evenings. The Spring Peepers are so loud that it is difficult to hear anything else. The pond is close to the alder bush, and the peepers are in their element. Occasionally, I can hear the call of the Chorus Frog. It sounds like a thumb running along the teeth of a comb. Several vocal robins add their song to the evening's chorus.

Among the alders near the pond, I also hear the nasal *peent* of the male American Woodcock and the whistle of its wings as it rises from the ground to dance for a mate.

Later that evening, I walk through the woodlot to the marsh. I hope to hear small animals scurrying through the forest, but I am too noisy. The marsh is very quiet. I hear the call of one solitary Leopard Frog among the cattails and the wing beats of a pair of ducks I have disturbed.

As the month of April comes to a close, I look forward to the busy school program in the months ahead. I have much to

share and always much more to learn. The school children and I will be doing pond studies together and taking walks through the woods to look for wildflowers. Next fall, we will be looking at seeds and seed dispersal and, in the winter, at animal tracks and droppings. Then it will be April again and another month of solitude and renewal.

The Baxter Conservation Area offers a conservation education program to local schools. Information can be obtained by calling Leanne Kane at 489-3592.

Here is the spring program for the general public:

April 26 — **Sounds in the Spring Night**
Meet at the Interpretive Centre at 8 p.m. with rubber boots and flashlights.

April 30 — **Spring Preparations in the Flood Plain**
Guided walks at 11 a.m. and 2 p.m. Wear rubber boots.

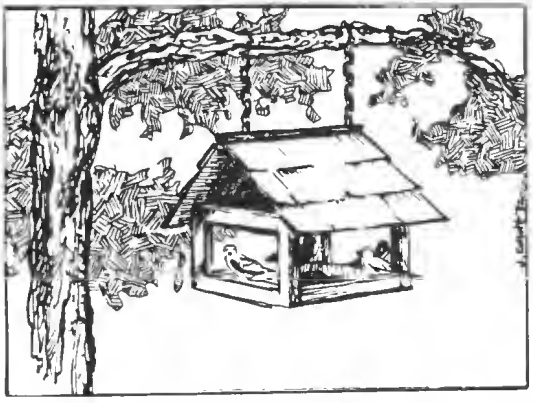
May 7 — **Nature Detectives**
Guided walks at 11 a.m. and 2 p.m. Wear rubber boots.

May 14 — **Trilliums and Trout Lily - Spring Wildflowers**
Guided walks at 11 a.m. and 2 p.m. Wear rubber boots.

May 28 — **Life in the Slow Lane - Basic Pond Study**
Pond studies at 11 a.m. and 2 p.m. Wear rubber boots. ¤

ATTENTION TEACHERS!

The Rideau Valley Conservation Authority, in cooperation with the Mississippi Valley and Cataraqui Valley Authorities, has produced a four-volume series of *Conservation Education Source Books*. Each volume contains several complete outdoor education topics for teachers. For further information, contact Charles Billington, Community Relations Coordinator, Rideau Valley Conservation Authority, Manotick, Ontario, telephone 692-3571.



Illustrated Guide to Some Hornworts, Liverworts and Mosses of Eastern Canada

by Robert R. Ireland and Gilda Bellolio-Trucco. 1987. National Museum of Natural Sciences, Ottawa. 205 pages.

Mosses and their kin, known collectively as bryophytes, are widespread and common in our area. We see them in woodlands, in wetlands, on roadsides, and even in our lawns and gardens. Yet, most of us have trouble getting to know these plants because most reference books depend for identification on cell structures and other features seen only under high magnification. Few give any importance to plant habit - what a whole plant looks like as you hold it in your hand.

Now, at last, there is available a guide to the common mosses, liverworts and hornworts of eastern Canada that uses keys based on such easily visible characters as plant habit, leaf shape and arrangement, and (for mosses) the size and shape of the spore capsule. The keys are accompanied by excellent illustrations of each species (see opposite for an example). The only equipment you need is a 10-20 power lens, although a low power microscope would come in handy on occasion. With this guide, you can learn to identify about 30% of the local moss species, 40% of the liverworts, and two of the three area hornworts.

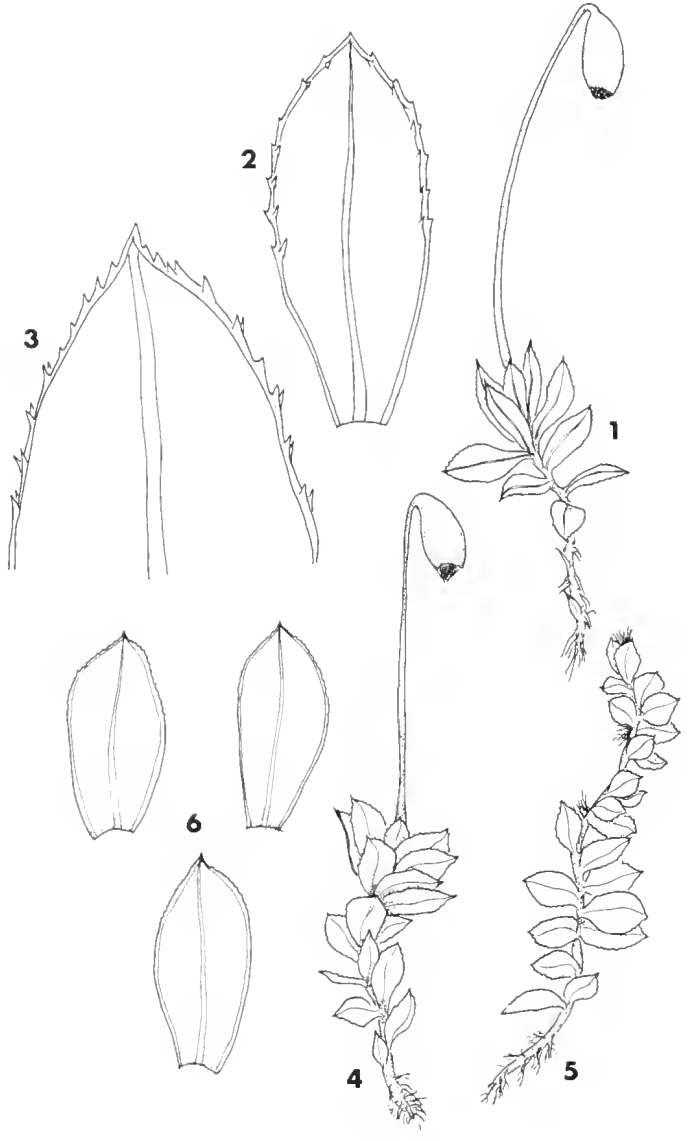
Before you get to the keys, you can read about the bryophytes' life cycles, learn to differentiate among mosses, liverworts and hornworts, get directions on how to collect and prepare a reference collection, and find out how to examine a bryophyte in preparation to identifying it. There is a list of reference books for additional background.

The keys and illustrations are the heart of the guide. You can't talk about bryophytes without using a certain vocabulary of technical terms, and this guide is outstandingly helpful in giving the reader an abundantly illustrated glossary that makes understanding easy.

To obtain a copy of *Illustrated Guide to Some Hornworts, Liverworts and Mosses of Eastern Canada*, contact Dr. Robert Ireland, National Museum of Natural Sciences, Botany Division, Box 3443, Station D, Ottawa, K1P 6P4, telephone 990-6447.

If you want a first-hand introduction to our local mosses, join Dr. Ireland's outing on June 18th (see *Coming Events*).

JMR



1-3, ***Mnium spinulosum****. 1. Habit (x4). 2. Leaf (x18). 3. Leaf apex showing paired teeth (x36). 4-6,* ***Plagiomnium cuspidatum****. 4. Habit (x4). 5. Habit of stoloniferous plant (x4). 6. Leaves (x9).*

Figure 78 from *Syllogeus 62: Illustrated Guide to Some Hornworts, Liverworts and Mosses of Eastern Canada* (1988). Reproduced courtesy of the National Museum of Natural Sciences, Ottawa. ¤

Sticky Groundsel (*Senecio viscosus*) in the Ottawa District

Daniel F. Brunton
2704 Marie Street
Ottawa, Ontario K2B 7E4

John Sankey recently described the stand of Sticky Groundsel (*Senecio viscosus* L.) that he found in August 1987 along the abandoned railway bed north of the Mer Bleue in Gloucester (Sankey 1988). As well as describing various aspects of the species' biology, he referred to it as rare in the Ottawa District. There are other stations known here, however, and to fill out the picture they are reported in the following.

First off, I should add my agreement to John's suggestion that the plant can produce an abundance of seed and seems to be at least potentially capable of rapid spread. The Blackburn Siding station that he reports, for example, is of quite recent origin. I examined this site several times in 1983 during an inventory of the Mer Bleue Conservation Area (Brunton 1984) without observing it or any other species of *Senecio*. I also found several other unusual weed species in addition to the Dwarf Snapdragon (*Chaenorrhinum minus*) that John found with the groundsel in 1987. These included Downy Chess Grass (*Bromus tectorum*), Carpetweed (*Mollugo verticillata*), White Bedstraw (*Galium mollugo*) and Thyme-leaved Sandwort (*Arenaria serpyllifolia*) (Brunton 1984). Most of these are typically found along railway tracks. The Blackburn Siding site is indeed an interesting area of introduced plants.

Sticky Groundsel was first reported in the Ottawa District by Trevor Cole (1970), who collected a specimen at Fitzroy Harbour Provincial Park in September 1968, the same month that Anne Hanes collected it as a weed in her garden in Rothwell Heights in Gloucester. A few other collections were made in downtown Ottawa in the 1970s. When Gillett and White (1978) prepared their Ottawa checklist and listed it as "Rare, Ottawa", that was an accurate statement. In the last few years, however, a number of new stations have come to light, including records from the Quebec portion of the District.

Figure 1 illustrates the present known distribution of Sticky Groundsel in the Ottawa District, based on collections in the herbaria of the Department of Agriculture (DAO), National Museum of Natural Sciences (CAN), University of Toronto (TRT) and my personal herbarium (DFB) (acronyms follow Boivin 1980). It includes specimens that I collected at Hull and Wakefield on the Quebec side and at four sites in Ottawa-Carleton since 1983.

Figure 1. Distribution of Sticky Groundsel (Senecio viscosus) in the Ottawa District.

Using the terminology and criteria of Gillett and White (1978), then, Sticky Groundsel should now be considered to be "Rare Quebec, Sparse Ontario" in the Ottawa District. That most of the records for it are from recent years and from conspicuous localities suggests that it is actively spreading. Perhaps in a few years it will be considered "Uncommon" in the District.

Acknowledgements

My thanks to Clarence Frankton for advising me of his collection and to Karen McIntosh for her help in the field. I also appreciate the access provided to the DAO, CAN and TRT herbaria by their curators.

Literature Cited

Boivin, B. 1980. Survey of Canadian herbaria. Provancheria 10, Université Laval, Quebec. 187 pp.

Brunton, D.F. 1984. The vegetation and flora of Mer Bleue, National Capital Commission Greenbelt, Ottawa-Carleton, Ontario. Conservation Studies 22, National Capital Commission, Ottawa. 206 pp.

Cole, T. 1970. The Sticky Groundsel. Trail & Landscape 4(1): 16-17.

Gillett, J.M. and D.J. White. 1978. Checklist of vascular plants of the Ottawa-Hull Region, Canada. National Museum of Natural Sciences, Ottawa. 155 pp.

Sankey, J. 1988. Botanical delights of the old Blackburn railway. Trail & Landscape 22(1): 8-10. ¤

An "Under the Birdfeeder" Flora

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Botany Division
National Museum of Natural Sciences
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In the fall of 1985, I bought a new birdfeeder and positioned it on a metal pole above a recently constructed flower bed. Soon the first snow fell, and I filled the lantern-like container with mixed bird seed. Within a few days, the feeder had attracted an avian clientele, consisting primarily of Black-capped Chickadees and assorted sparrows. All through the winter, these birds sloppily gobbled seeds. Consequently, by springtime, a low mound of debris had accumulated under the feeder.

Foolishly, I had assumed that birds were efficient eaters and would have devoured most of the seeds. When a dense carpet of green sprouted from the mush beneath the birdfeeder, I realized that these birds were in fact wastrels, probably preferring some seeds over others.

Shepherd's-purse

Initially, I intended to remove this mass of sprouts from the flower bed, but curiosity got the better of me. Since I wanted to know what all those seedlings were, I had to let them grow to maturity. By early July, most were flowering and at an easily identifiable stage. I collected specimens of each kind of plant and weeded out the excess, removing an overgrown eyesore in the process.

Sixteen species of plants were growing under the birdfeeder (see Table 1). Although oats, wheat, sunflowers, millet, flax and mustard were expected, a few plants, such as Stickseed, Cleavers and Shepherd's-purse, were surprising. Perhaps these weeds were growing in the fields and harvested with the main crop, or, less likely, transported by the birds themselves. As these plants were found only under the birdfeeder, it is doubtful that they originated from dormant seed in the soil.

One plant I did not notice growing was Buckwheat (*Fagopyrum esculentum*). Either the seed mix lacked this species or the birds devoured it, for I have often observed this plant flourishing where mixed bird seed had been

spilled in a previous winter. Another absentee was Corn (*Zea mays*), which is often a component of seed mixes.

Undoubtedly, seeds of other species of plants can be found in mixed bird seed depending on the components and purity of the seed. (Some seed crops can be contaminated with weed seeds.) With patience, curiosity and proper substrate, you should be able to discover additional kinds of plants under your birdfeeder.

TABLE I

PLANTS GROWING UNDER MY BIRDFEEDER

Wild Oats	*Avena fatua*
Barnyard Grass	*Echinocloa crusgalli*
Millet	*Panicum miliaceum*
Foxtail	*Setaria glauca*
Wheat	*Triticum aestivum*
Black Bindweed	*Polygonum convolvulus*
Lady's Thumb	*Polygonum persicaria*
Pigweed	*Amaranthus retroflexus*
Cow Cockle	*Vaccaria pyramidata*
Field Mustard	*Brassica campestris*
Shepherd's-purse	*Capsella bursa-pastoris*
Pea	*Pisum sativum*
Common Flax	*Linum usitatissimum*
Stickseed	*Lappula squarrosa*
Cleavers	*Galium aparine*
Common Sunflower	*Helianthus annuus*

Black Bindweed

"A New World of Interest"

J.W. (Jack) Holliday

After World War II, a marvellous invention from Europe was introduced to Canadian sports fishermen, the spinning reel. Those of us who used the time-honoured casting rod and reel were amazed and delighted with the new system of longer, more flexible rods - fast-retrieving reels with a built-in drag, transparent monofilament lines and smaller, more effective lures.

Instead of casting a heavy 15 cm "plug" for 15 or 20 m, I could, with a flip of the wrist, send the tiny spinning lures out 70 m or more. More control, greater coverage, better lures = more fish and more enjoyment.

I live only a few minutes walk from the Ottawa River, near the Champlain Bridge. During most spring and summer evenings in the late 1940s and 1950s, I could be found enjoying an hour or two of spin-casting from the river shore.

Small-mouth Bass were plentiful, and I caught the odd Pickerel or Pike to add variety. I returned nearly all of them to the river. One particular bass with an odd-shaped head I caught many times.

One May evening after several days of rain and drizzle, the wind swung into the north, skies cleared, and a bright sun turned the newly unfurled leaves into the brightest green imaginable. Picking up my rod from its corner, I hurried to the river to get in a couple of hours of fishing and to enjoy the spring evening.

But the wind was strong and cold. Casting into the teeth of the gale was not enjoyable. The line ballooned and hung up on shrubs, and my hands soon became icy. Before long, I'd had enough, and, turning my back on the wind, I retreated homeward.

The path wound through second growth trees and clumps of shrubbery - buckthorn, ash saplings and honeysuckle. Carefully guarding my rod-tip, I ducked under branches and stepped carefully over rocks and roots.

Suddenly, right before my eyes, there was a brightly coloured little bird, a warbler, obviously, but one I'd never noticed before. Black mostly, with some white patches and a firey orange throat. I froze and watched it hunting among the shrubs for midges. Soon I noticed another, then more.

The Yellow Warbler I knew, the others were all nameless. There were 20 or more, all busily foraging. They paid no atten-

tion to me, and not since have I been so close to such a variety of birds.

Apparently, the strong north winds had halted the migration. Food was scarce as the rain and following cold had also slowed the emergence of caterpillars. The winds blew the midges, emerging from the river, quickly ashore where they lighted in the shrubs. The warblers had gathered to take advantage of this (for them) life-saving food.

Next morning, at the Geodetic Survey of Canada building at the Experimental Farm where I worked, I looked in a dog-eared and coming-apart *Birds of Canada* and was able to identify (American) Redstart, and Blackburnian, Myrtle (now Yellow-rumped) and Black and White Warblers.

As Taverner wrote, "The warblers are the delight of amateur bird observers. So small that few but the enthusiast ever see them, but so numerous and brilliantly coloured that their discovery opens up a new world of interest to the novice." A new world of interest indeed.

As soon as I could afford it, I bought Peterson's *A Field Guide to the Birds* and, eventually, a pair of binoculars ($60.00, a week's salary) to make searching for warblers in the spring woodlands possible.

Now, 40 years and four pairs of binoculars later, there is still the pleasure of recognizing a Blackburnian or a Magnolia in the trees along the river.

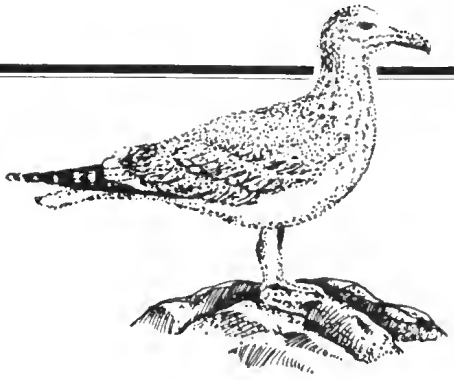
I'm sure all birders can remember the instant they first became interested in birds, and the first good sighting of a warbler has been the trigger for more than one of us.. ¤

Tree Feather

A lone tall tamarack
at the edge of the bog
on a cold April night
like a Gray Owl's
tail feather
spread flat against
the starlit sky.

Robert W. Nero

Fall Bird Sightings



Tony Beck

August - November Period

The late summer still radiates green but blows a cool north wind. With it comes a disturbing hush over the countryside. All of the emphatic summer songs are replaced by soft and secretive whispers. No longer do we awake to the vibrant voices of proud male passerines. Instead, our morning dawns to faint "chips" and "chatters" of migrants in transit.

As we approach the autumnal equinox, we must prepare for fall colours both animal as well as vegetable. Fresh young birds, intermingled with faded and worn parents, flit through the browns, yellows and reds of the forest.

Near the rivers and ponds, birds of every description gather. When an orange sun sets over the Ottawa River, the sky quickly darkens as thousands of birds fly in from the fields to roost on the calm bay waters. Honks and wing whistles are deafening in a grandiose display of teeming wildlife.

When a storm front blows into the area, the small shorebird squadrons twist and turn over the sandy shorelines searching for a suitable rest spot. The downpour quickly passes, and the waders zigzag in unison upward then southward, disappearing against the dark clouds.

Ah, yes. Such is the fall! A special time full of life but the harbinger of winter woes.

The fall of 1988 could be considered a normal one with the exception of the record high water level on the Ottawa River which left virtually no shorebird habitat. Fortunately, the sewage lagoons, particularly the sandy and shallow Embrun lagoons, turned out to be attractive to both birds and birders.

This was also the fall that Ottawa was visited by its best bird in many years. It took a lot of skill and awareness (not to mention a bit of luck) to add California Gull to the Ottawa District list.

On October 13th at the Nepean Dump, a dark-gray mantled gull was noticed. Slightly larger than the surrounding Ring-billed Gulls, it had green legs, dark eyes and a diagnostic red and black bill spot. Ottawa had clinched its 328th species and Ontario its third record for California Gull. Unfortunately, only a few lucky souls managed to relocate the bird in the following days. Almost a month later, on November 12th at the Cook Road Dump in Aylmer, birders again confirmed a California Gull, a first record for the Province of Quebec. The bird matched the full adult winter plumage description of the Nepean record and was most probably the same bird.

AUGUST

August began with obvious movement on the sewage lagoons. Both the Embrun and Richmond lagoons were active with large numbers and many species. On August 4th at Embrun, there were 580 Semipalmated Sandpipers, 125 Pectoral Sandpipers, 110 Lesser Yellowlegs, 105 Least Sandpipers, 75 Killdeers, 14 Spotted Sandpipers, seven Semipalmated Plovers, four Greater Yellowlegs, two Wilson's Phalaropes, two Common Snipes, and one each of Upland Sandpiper, Solitary Sandpiper, White-rumped Sandpiper, Baird's Sandpiper, Stilt Sandpiper and Black-bellied Plover. On the same day, at the Richmond lagoons, there were 105 Killdeers, 85 Least Sandpipers, 80 Lesser Yellowlegs, 72 Pectoral Sandpipers, 35 Semipalmated Sandpipers, five Spotted Sandpipers, five Greater Yellowlegs, four Solitary Sandpipers, two Sanderlings and two Wilson's Phalaropes. Eleven Short-billed Dowitchers were seen there on the 6th.

On the 4th, Ottawa Beach may not have had anywhere near the activity of the lagoons, but it was a rest spot for eight Ruddy Turnstones and five Whimbrels. On the 5th, the small exposed sand bar was visited by seven Common Terns (a family), a single Caspian Tern, three Black-bellied Plovers, one Semipalmated Plover, one Ruddy Turnstone and small groups of both Sanderlings and Lesser Yellowlegs. On the 9th, there were five Red Knots and a small number of Short-billed Dowitchers.

The shorebirds and the smaller ducks frequenting the Ottawa Beach area were obvious targets for the swift and powerful Peregrine Falcons. An adult *tundrius* peregrine was seen there on the 5th, but more consistently through August, it was seen on the Coats Building at Tunney's Pasture.

Water levels at Shirleys Bay were high, but there was still some shorebird habitat. Among the regular shorebirds, the most noteworthy were three Stilt Sandpipers on the 6th. As many as five Black-crowned Night-Herons were seen there throughout August.

On the 18th, Lesser Golden Plovers moved in to the Embrun

sewage lagoons. By the end of the month, there were many seen on the Experimental Farm off Greenbank Road. Among them were two Buff-breasted Sandpipers.

Ducks began to move into the Ottawa District right from the start of the period, and numbers continued to grow. A Lesser Scaup was visible at Remic Rapids on August 3rd, and on the 7th there were two Common Goldeneyes at Deschênes Rapids. These birds could easily have been local breeders.

Deschênes Rapids was a favourite spot for gulls and Double-crested Cormorants, and on the 7th an adult Lesser Black-backed Gull was seen. Great Black-backed Gulls were common here throughout the month.

Two Bald Eagles were reported at Mississippi Lake on August 27th. It would not be surprising to find them breeding in this area.

By the end of the month, it was clear that birders were not the only ones to discover the abundance of shorebirds at the lagoons. Peregrine Falcons, both adult and banded young, as well as Merlins were reported surveying the waters for a meal.

By August 18th, migrating passerines could be heard calling overhead at night. Many migrant warblers were seen at Britannia Woods at this time. Unfortunately, due to bad weather and lack of coverage, many passerines passed through undetected. On the 31st in Britannia Woods near the pond, a Connecticut Warbler was seen.

SEPTEMBER

September started off with a bang with more obvious movement.

On the evening of the 2nd, a Caspian Tern flew west over Deschênes Rapids. At Mud Lake at Britannia, a spectacular starling-blackbird roost consisting of thousands of individuals dazzled many spectators. Five Black-crowned Night-Herons and dozens of Common Nighthawks became active as the evening grew darker.

On the 4th, an unprecedented 300+ Hudsonian Godwits landed, where else, at the Embrun sewage lagoons. Other shorebirds here were five Lesser Golden Plovers, five Short-billed Dowitchers, one Stilt Sandpiper, one Whimbrel, two Red Knots, three Dunlin and two Sanderlings.

On the same day by the South Gower Boundary Road near Gabert Road, there was a Baird's Sandpiper and a Whimbrel with a large contingent of Killdeers, and lesser numbers of Black-

bellied Plovers and Lesser Golden Plovers.

On the 3rd and 4th, a Buff-breasted Sandpiper was feeding with other shorebirds on a sod farm just north of Quyon. This was a first record for the Outaouais district.

On the 5th near Greenbank Road on the Experimental Farm, there was a Buff-breasted Sandpiper mingling with over 150 Lesser Golden Plovers.

The same day at Embrun, a Red-necked Phalarope, a Baird's Sandpiper and many Greater Yellowlegs were seen. At the Richmond lagoons, 20 Wilson's Phalaropes, 20 Stilt Sandpipers and three Short-billed Dowitchers were present.

During the first week of September, all three phalarope species were present: Wilson's at the Richmond lagoons, Red-necked at the Embrun and Munster lagoons, and, flying by Innis Point on the 5th, a Red Phalarope followed by two Red-neckeds. Even more amazing were five tern species recorded for the same week. Along with Common and Black Terns were the Caspian at Deschênes Rapids on the 2nd and an immature Arctic Tern seen on the 4th and 5th at Ottawa Beach and Britannia, and an immature Forster's Tern seen at Shirleys Bay on the 5th.

The early part of September played host to all the regularly occurring warblers, including Orange-crowned. Britannia Woods and surrounding areas were very active. Many thrushes, sparrows and flycatchers, including a Yellow-bellied, were passing through.

On September 11th at Mud Lake at Britannia, a male Eurasian Wigeon was seen with the many American Wigeons. This was probably the same bird that spent the fall of 1987 on the same lake.

Other interesting birds on the 11th were a Turkey Vulture seen soaring over Deschênes, a Palm Warbler feeding on the ground with House Sparrows at Britannia Yacht Club, an Osprey fishing over Deschênes Rapids, and at Embrun singles of Hudsonian Godwit, Baird's Sandpiper and Wilson's Phalarope feeding at the lagoons.

Hundreds of Common Nighthawks became active in the evenings of the first week in September, especially along the Ottawa River between Britannia and Lemieux Island.

On September 23rd, four Snow Geese made an appearance with the Canadas at Ottawa Beach.

On the 25th, a Yellow-breasted Chat was reported from Britannia Woods where many warblers were still around, including Orange-crowned.

Throughout September, Ottawa's first confirmed Sandhill Crane family was seen around the Mer Bleue.

About the 18th, a Red-headed Woodpecker was seen near Carp where locals reported this species as a breeder.

OCTOBER

The flow of birds in October turned out to be a little steadier than in September.

At Ottawa Beach, the waterfowl numbers were building to the thousands. On the 1st and 2nd, five Surf Scoters were seen there, and on the 2nd, 25 Hudsonian Godwits with a larger number of Dunlin paid a short visit to the sand bar. Lesser and Greater Scaups and Common Goldeneyes were plentiful out in the deeper water.

At Shirleys Bay on the 2nd, there were three Surf Scoters, one White-winged Scoter and two Red-breasted Mergansers. On the 1st, there were three American Tree Sparrows seen near the parking lot. Three Lincoln's Sparrows were reported at Watt's Creek on the 1st.

In Britannia Woods on the 1st, a few lone warblers were trickling through such as Black-throated Green, Northern Parula and Orange-crowned. Two Rusty Blackbirds were also seen.

On the 2nd at the Richmond sewage lagoons, a young Long-billed Dowitcher was discovered.

A Greater White-fronted Goose was present with two Snow Geese and a multitude of Canadas at Ottawa Beach on the 8th and 9th. Four Redheads were in the area as well.

On October 9th, a Sharp-tailed Sparrow was found near the Embrun lagoons. In the lagoons, a Hudsonian Godwit was present.

Along the dike at Shirleys Bay on the 9th, there was a single Boreal Chickadee in a flock of Black-capped Chickadees. Nearby, a Field Sparrow was noted. In the bay, there were hundreds of Gadwalls, Northern Shovelers and American Wigeons. In the adjacent woodlots, there were many Rusty Blackbirds, White-throated and White-crowned Sparrows, and Hermit and Swainson's Thrushes.

In the trees bordering Ottawa Beach, a late Black-throated Blue Warbler and a Blackburnian Warbler were seen, while five Surf, one White-winged and two Black Scoters were feeding in the deeper waters off shore.

Still on the 9th, there were 14 Surf Scoters on the river by Grandview Drive. There were a few Common Loons and many large rafts of diving ducks seen along this stretch of river during all of October.

A Northern Mockingbird was reported from the corner of Maitland and Garfield Streets.

October 13th came up with more lagoon activity, this time at the Munster sewage lagoons where there were 42 Pectoral Sandpipers, four Greater Yellowlegs, three Semipalmated Sandpipers, two Hudsonian Godwits, two Common Snipes, two Dunlin and one each of White-rumped Sandpiper, Lesser Yellowlegs and Killdeer.

On the afternoon of the 12th, a stunned Northern Saw-whet Owl was picked up from Parkdale Avenue and brought to the Humane Society. It was released later that evening.

On the 13th, there were eight species of gulls recorded at the Nepean Dump. The best one was the California Gull, of course, but noteworthy also were Lesser Black-backed, Thayer's, Iceland and Glaucous Gulls mixed in with the many Great Black-backed, Herring and Ring-billed Gulls.

On the 15th, there were three different plumages of Lesser Black-backed Gull at the Nepean Dump, a second year, a third year and an adult plumage.

At Britannia on the 13th, a Eurasian Wigeon was still swimming around with the 200 or more American Wigeons. Also present were 25 Hooded Mergansers, 20 Gadwalls and the regular Mallards, American Black Ducks, Wood Ducks, and Blue-winged and Green-winged Teals. Britannia Woods was buzzing with dozens of Winter Wrens, Hermit Thrushes and Chipping Sparrows, as well as a late American Redstart.

The 13th had an interesting raft of scoters on the Ottawa River. It consisted of 100 Black Scoters and 30 White-winged Scoters. Also on the river, there were a female Canvasback and six Redheads.

On the 15th, two Red-necked Grebes and six Snow Geese were present at Ottawa Beach.

A Northern Shrike was found on October 23rd along the Hope Side Road. Beside Eagleson Road there was a Lapland Longspur in a flock of Horned Larks. The Ottawa River continued to reveal new migrants with a Red-throated Loon and an Oldsquaw seen off Grandview Road. American Coots were also present here.

On October 29th, 80 Hudsonian Godwits passed by Constance Bay, and 30 Brant were located on the river near Dick Bell Park. Many Dunlin were noticed flying overhead throughout the day. Also on the 29th, in a field across from the Log Farm on Cedarview Road, a single Greater White-fronted Goose was present with some 400 Canada Geese.

October 30th was a very active day with hundreds of Brant passing through. two separate sightings of Red-throated Loon were made from Dick Bell Park. An immature Golden Eagle was seen across the river on the Steele Line, while another was reported from Shirleys Bay. An immature Bald Eagle was seen flying down the Ottawa River the same day. Thirty Oldsquaw were present at Lac Deschênes. The evening brought in a single Purple Sandpiper to rest on the breakwater of Dick Bell Park.

During the last week of October many Snow Buntings were moving through, and considerable numbers of waterfowl were building up on the Ottawa River. Obvious increases in Common Goldeneyes, both scaups, Ring-necked Ducks, Buffleheads and Common Mergansers were noted.

The Eurasian Wigeon was present all month at Mud Lake, and the Sandhill Crane family stuck around for all of October as well.

NOVEMBER

Although some of October's activity carried into the next month, November turned out to be slow for birds.

On November 3rd at the Casselman sewage lagoons, a female Ruddy Duck was present. Was this a local bird or a distant traveller? At the Embrun lagoons, there were 35 Green-winged Teals and a single Common Goldeneye. A Northern Mockingbird visited Parc Brébeuf that day.

On the 4th, four Rough-legged Hawks were seen along the Steele Line.

On the 5th, a survey of a burn area surrounding the Quyon dump came up with four Black-backed Woodpeckers, while a Three-toed Woodpecker was found near McLaren's Landing. The same day produced three Oldsquaws at Shirleys Bay. On the 6th, a single female Oldsquaw was seen among the hundreds of American Black Ducks at Ottawa Beach.

November 6th contributed five Purple Sandpipers and one Dunlin off the Britannia breakwater. At Ottawa Beach there were two Canvasbacks, and at Moodie Drive there was a Snow Goose feeding in a field with hundreds of Canada Geese. There were eight Black Scoters off Dick Bell Park and a lone Surf Scoter at

Shirleys Bay. On the 7th, a Merlin was hunting along Dick Bell Park.

On November 10th, a few shorebirds were still hanging around. At the Munster lagoons, there were many Greater Yellowlegs, White-rumped Sandpipers, Pectoral Sandpipers and a single Hudsonian Godwit. Three Oldsquaws also found this lagoon system suitable for a rest. At the Richmond lagoons, there were many Black-bellied Plovers, Dunlin, Lesser Yellowlegs and Pectoral Sandpipers.

By this time, the lack of raptor migration was clear, but in the silence, a Snowy Owl made a stopover at Stillwater Marina on the 19th.

As the month progressed, birds became fewer, the days shorter and the air colder. Winter was setting in.

On November 27th, the burn area along the Lac des Loups Road north of Quyon was one of the few productive areas in the District. The woodpeckers were making good work of the blackened tree bark. Found here were many Hairy and Black-backed Woodpeckers. There were also singles of Downy, Pileated and Three-toed Woodpeckers.

Many of the Ring-billed Gulls had departed, leaving Herring and Great Black-backed as the dominant gulls. Mixed in with them were small numbers of Glaucous and Iceland Gulls. On the 21st, there was still a Lesser Black-backed Gull at the Nepean Dump.

The month closed with much energy spent and few birds found. Finch numbers were low and only a few stragglers stayed behind.

On the 26th, a male Barrow's Goldeneye was seen at Deschênes, while at Ottawa Beach on the 26th and 27th, there remained a female Canvasback and a late Pied-billed Grebe.

Goodbye Fall, and Hello Winter!

Acknowledgements

A special thank you must go to Larry Neily and all contributors to the main source of this article, the Ottawa Field Naturalists' Bird Status Line. ¤

Unexpected Blessing

Early morning routine
driving automatically
radio music fades in and out
stop at a red light
then, a shivering *reee*!
- a blackbird's spring song
half-heard, can it be?
I roll the window down
and peer out
again that musical trill -
there, atop a hydro pole
above the intersection
a male redwing
lifting his wings and cape
blessing me
with that familiar call -
so entranced I miss seeing
the light change
shift awkwardly and pull away
smiling all the way
to the office.

Robert W. Nero

The Woodcock's Display Ritual

Roy John

Two years ago, there was considerable discussion about the exact sequence of the American Woodcock's spring display. Many of us searched our memories and any reference books we could find, but we never really resolved our questions. So last spring while at Presqu'île Provincial Park with Tony Beck, I decided to watch the real thing. Here's what we saw.

Just as the light was fading into the grayness of twilight, we heard the trilling of a woodcock overhead. We walked quietly and slowly through a scrubby, narrow patch of wet wood bordering the road. We knew the bird was circling overhead from the twittering sound and tried to judge where the middle of his area was. We waited, and in the half-light, saw the bird land at the edge of a cottage lawn that backed onto the woodlot.

Woodcocks are dumpy birds with short legs, a very long, straight bill and beautiful plumage. This bird stretched as much as he could on his stumpy legs, and, with his wings drooping by his side, he made a low-volume noise like a stifled hiccough. This was rapidly followed by the well-known *beeent* sound through an open bill. He rested for a few seconds and then repeated this "hiccough - beeent" call.

This happened several more times before the bird leapt into the air and flew silently at about 30^{o} through the trees. When he got a metre or so above the treetops, he levelled out his flight and began flying in imperfect circles about 10 m in diameter.

Once he began his level flight, he started the piping trill again. This he maintained for two to three minutes before dropping like a silent stone to his spot on the lawn. He then repeated the entire performance again and again. Despite all his efforts, we did not see any sign of a potential mate.

As near as I could tell, the *beeent* noise was always made on the ground by this and several other birds. The twittering was always produced in the air.

But don't take our word for it. This charming, amusing and fascinating spectacle is rather magical and is well worth the little effort required to see it for yourself. The woodcock's wonderful extravaganza comes every spring to a woodlot near you. ¤

1988 Peregrine Falcon Release Project in Ottawa

Chris Ellingwood

INTRODUCTION

1988 marked the 13th year that Peregrine Falcons (*Falco peregrinus anatum*) have been released in the Ottawa-Hull region. Between 1976 and 1986, all releases occurred in Hull on one of two buildings, the Fontaine Building and Place Vincent Massey. A total of 63 falcons were released over this period (Di Labio and Dauphiné 1987, McDonnell and Lévesque 1988).

Urban release sites are chosen over wild cliff sites because building roofs and ledges closely approximate the features of a cliff nesting site and there are almost no predators in the city. Young falcons raised in the wild are subject to dangerous attacks by other raptors and also by crows and ravens. Only the presence of the parents protects them. Rooftops are free of most predators, and every effort is made to minimize possible urban dangers for these young falcons.

In 1987, the sites and strategy for the release program were changed after recommendations in a new National Peregrine Falcon Recovery Plan stated that "mass releases" should be implemented. The basis of a mass release program is to concentrate the release, of a minimum of 10 falcons a year, at one release site over several consecutive years. It is believed this will increase the number of young falcons that survive each year to a point that several pairs will form, and nestings will occur within three to five years after the program is implemented (Canadian Wildlife Service 1987). The technique was used in Ottawa in 1987 and 1988, and also in the Maritimes and the Province of Quebec.

Last year, there was one successful nesting in the Ottawa Valley involving a banded falcon (Tony Beck, personal communication). Several other falcons released in Ontario have nested successfully in the past few years in such U.S. cities as Springfield, Massachusetts, and Toledo, Ohio.

THE 1988 OTTAWA RELEASE

In 1988, 15 Peregrine Falcons were again released in the Ottawa area as part of the mass release program, jointly coordinated by the Ontario Ministry of Natural Resources and the Canadian Wildlife Service. Originally, the plan was to use the same sites as last year, the Animal Research Centre farm on Woodroffe Avenue, and the National Museum of Natural Sciences building on Metcalfe Street. However, one week before the project was to begin, a female falcon released in 1987 returned for several days and frequented the silos around the release site at the farm. As older birds have been known to attack and occasionally kill newly released falcons, a new site had to be found.

Numerous criteria are studied when reviewing a building as a possible release site. Of primary importance is a building that is prominent, that is, of sufficient height and position that it is easily found visually by the falcons when they are away from the site. Also, an area of open space around the building allows the falcons to search for and catch their flying prey as it crosses the open territory. An area with a good supply of pigeons, starlings, sparrows and other prey species is essential. Other considerations are the proximity to possible dangers such as hydro wires, busy roads and open chimneys; a place falcons often fall into when learning what perches they can land on. Security is also of major importance, as young peregrines are very sensitive to any disturbance. After being placed in the hack box, a wooden box with a barred front, extraordinary measures are taken to ensure that no human contact is made, and to avoid imprinting.

Agriculture Canada's Sir John Carling Building epitomized many of these criteria, and was chosen as an alternative site. On June 14th, the first six of 15 falcons arrived in Ottawa from the Canadian Wildlife Service breeding facility in Camp Wainwright, Alberta. The four-week-old, down-covered chicks were placed high atop the Carling Building in a hack box. They spent the first 16 days in the hack box, and were fed a diet of whole quail dropped through a chute in the top of the box. Development progressed quickly, and after two weeks they were testing their wings and preening their newly unsheathed plumage. On June 30th, the bars were removed, and the falcons poured out onto the roof. The first few hours were spent exploring the roof and exercising their wings. About nine hours after release, the youngest male leapt off the roof and made his first flight and subsequent rough landing. By the next day, all the falcons were making short flights around the site and chasing each other.

Volunteer observers from The Ottawa Field-Naturalists' Club were present on release day and the days following to make notes on the falcons' behaviour and to ensure their safety should one

A young Peregrine Falcon explores the roof of the Carling Building shortly after its release.
Photograph by the author.

get into trouble.

Just as these peregrines were becoming proficient flyers, a second group of falcons arrived at Ottawa International Airport. Three females and a male were placed in the hack box at the National Museum of Natural Sciences on July 5th. Media attention was focussed on this site, and the museum set up a special display on the Peregrine Falcon, complete with a video monitor that showed the falcons in the hack box as seen by a camera placed on the roof. Great public interest was generated by the falcons' presence, and many passers-by stopped to view the antics of the screaming peregrines overhead after they were released on July 21st.

The first two releases were complicated by the presence of an adult peregrine that remained in the downtown area over the summer. We believed this to be the adult that had been frequenting the area around Tunney's Pasture for several months previously. One week after release of the falcons at the Carling site, the adult arrived and began chasing the falcons away from the site. Luckily, they were fairly adept at flying and managed to evade the aggressive pursuits of the adult. The young falcons spent many hours away from the site each day, but

would return to feed on the quail set out for them whenever the adult was not present. At the museum, the adult would visit the site for only a few minutes each day, allowing the young to remain around the site most of the day.

Due to the presence of the adult at the Carling Building, the planned second release on this site was deemed unsafe, and Ministry officials urged us to find a site that was at least 10 kilometres away. After examining several sites outside Ottawa, the Roy Errington Building of Atomic Energy of Canada Limited in Kanata was chosen. The staff was very eager and excited to have peregrines released on their building and aided us greatly in setting up the site despite the very short notice. On July 28th, four males and one female were released from this site.

DISCUSSION

At all the sites, the loyalty of the falcons, particularly the females, to the buildings was encouraging and made for easy monitoring of their movements. At the Carling Building, at least two falcons were present up to four weeks after release, and, at the other two sites, at least one falcon was present up to five weeks after release (see Table 1).

All 15 peregrines were believed to have survived the first few weeks after release, a critical period for any young falcon. In fact, only two minor incidents occurred over the summer, both involving a falcon found on the ground after a thunderstorm within a week of their release. Both falcons were rescued and re-released unharmed. We would like to thank Kit Chubb for the care she gave one of the birds during its recuperation.

Although reports of young peregrines around the Ottawa region were infrequent over the summer, we know that several falcons were seen in Aylmer, Hull and Nepean on numerous occasions. One report of special note involved the observations of a caretaker at Carlingwood Shopping Centre early one morning. He witnessed the stoop and kill by a young banded peregrine on an immature Ring-billed Gull and the subsequent devouring of the prey in a corner of the parking lot. Observations of actual kills by peregrines are rare, but the successful kill of such a large prey species by a newly released falcon is extraordinary.

The last confirmed sighting of a falcon came from United States Fish and Wildlife Service staff in Syracuse, New York, who reported the presence of one of the peregrines, 5C4, hunting in their city until at least the middle of September. This is not the only time Ontario-released falcons have frequented New York urban areas. Albany and Syracuse seem to be favourite destinations for our falcons as they begin their migrations.

TABLE 1
MAIN EVENTS OF HACKING AND RELEASE FOR EACH SITE

	Band #	Sex	Date of Arrival (age in days)	Date of Release (age in days)	Time of 1st Flight (hours after release)	Last Sighting Around Building (days after release)
Carling Building	5C3	F	JN 14 (28)	JN 30 (44)	<48	JY 22 (22)
	5C4	F	JN 14 (27)	JN 30 (43)	<48	JY 26 (26)
	5C5	F	JN 14 (26)	JN 30 (42)	<48	JY 19 (19)
	5C6	F	JN 14 (26)	JN 30 (42)	<48	JY 26 (26)
	3T8	M	JN 14 (27)	JN 30 (43)	<48	JY 5 (5)
	3T9	M	JN 14 (28)	JN 30 (44)	9	JY 5 (5)
Museum Building	6C7	F	JY 5 (29)	JY 21 (45)	<48	A 12 (22)
	6C8	F	JY 5 (29)	JY 21 (45)	24	A 19 (29)
	6C9	F	JY 5 (28)	JY 21 (44)	30	A 14 (24)
	5T5	M	JY 5 (28)	JY 21 (44)	6½	A 4 (14)
Atomic Energy Building	6T8	M	JY 12 (28)	JY 28 (44)	<36	A 9 (12)
	6T9	M	JY 12 (28)	JY 28 (44)	5 min.	A 1 (4)
	7T0	M	JY 12 (28)	JY 28 (44)	< 1	A 8 (11)
	7T1	M	JY 12 (28)	JY 28 (44)	< 2	A 1 (4)
	8C6	F	JY 12 (28)	JY 28 (44)	<36	A 31 (34)

JN = June; JY = July; A = August

CONCLUSIONS

With an anticipated mortality rate of 75% in the first year, it is still hoped that several peregrines released in 1988, and possibly from 1987, will return this spring. After they reach maturity at two or three years of age, it is possible that at least one pair will establish themselves in the Ottawa area in the near future. We encourage birdwatchers to watch for returning peregrines, particularly around the release sites used last year. Please telephone the Canadian Wildlife Service to report sightings of any falcons spotted sporting a red aluminum leg band anywhere in the Ottawa-Hull region.

Acknowledgements

The success of the 1988 Peregrine Falcon Release Project was dependent on the many people and organizations involved, and we would like to thank them for their support. First, we would especially like to thank those organizations that provided the funds necessary to purchase the falcons: the Canada Life Assurance Company, the Federation of Ontario Naturalists, and Andrex Holdings Limited, who collected funds from generous individuals on behalf of the Canadian Wildlife Service. Special thanks go to those members of The Ottawa Field-Naturalists' Club who volunteered their time to observe the falcons and in particular to the team leaders, Marg Benson, Don Davidson and Ellen Radix. We would like to thank the staff of the Sir John Carling Building, Agriculture Canada and the Department of Public Works for their support and cooperation. Thanks also go to the staff of the Animal Research Centre for the sightings they reported over the summer. The National Museum of Natural Sciences maintenance and security staff were especially helpful, as were Carol Thiessen, Kathy Belrose and the museum's exhibit department. The staff of Atomic Energy of Canada were very supportive and cooperative. Finally, thanks go to our summer student, Marie-Claude Cholette for her tireless effort and dedication.

Literature Cited

Canadian Wildlife Service. 1987. National *anatum* Peregrine Falcon Recovery Plan, Draft. 12 May 1987.

Di Labio, B.M. and C. Dauphiné. 1987. The Peregrine Falcon Release Program in Hull. Trail & Landscape 21(2): 104-110.

McDonnell, J. and H. Lévesque. 1988. Peregrine Falcon Release Project in Ottawa, Summer 1987. Trail & Landscape 22(3): 131-136. ¤

The Ottawa Valley Spring Roundup 1988

Tony Beck

The 1988 Spring Roundup, held on May 29th, managed to lure 43 keen birders into the field. Their long hours and hard work resulted in a count total of 183 species (37,195 individuals). Traditionally, the Spring Roundup has been held on the Victoria Day weekend, but in 1988 it was held the following weekend. It was hoped that this change would attract more participants into the field since on previous counts most potential observers were involved with other long-weekend commitments. This year, participation was a little higher than normal, and the final weekend in May will soon be a new tradition. The only regret with this change is that spring migration has passed its peak, but as this year's total has shown, the pickings can still be excellent.

The best bird of the count was the Yellow-headed Blackbird found near the Russell sewage lagoons in the southeast section. This is one of the very few verifiable reports in the Ottawa District. There has also been a number of recent reports for this species just east of the Ottawa District. The Blue-gray Gnatcatcher in the northwest section should also be considered a significant count record.

Except for the great excitement generated by these two birds, most of the day was slow. Owling was fairly quiet, but the dawn chorus broke into a hyperactive rollercoaster ride of bird identifications. After a few hours of intense activity, the migrating birds vanished into the blue sky. By 11 a.m., the only action seemed to come from males on territory. The bird day turned into a dog day as the sultry heat rose to 28^{o}C. By 1 p.m., if the sweat didn't get into your eyes, the heat haze distorted all views through optical equipment. Throughout the day, the skies were mostly clear with temperatures in the high 20's. A mild breeze from the northeast was not enough to cool the air. As the day came to a close, the birders who endured the slow afternoon were rewarded with an active dusk. The cool evening with its brilliant pink sky transformed the count into an experience of natural beauty.

Thanks to all participants and in particular the section leaders, John Dubois (northwest), Jim Harris (northeast), Gordon Pringle (southwest) and Richard Brouillet (southeast).

* * *

This year's Spring Roundup will be held on May 28th. Telephone the co-ordinator, Bernie Ladouceur, (592-3133 (home) and 738-1526 (work)) to register your interest in participating.

Ottawa Valley Spring Roundup Results

Species	SW	SE	NW	NE	Total
Common Loon	3	3	7	2	15
Pied-billed Grebe	2	2	1	20	25
Double-crested Cormorant	4	3	6	2	15
American Bittern	20	9	7	17	53
Least Bittern			1	4	5
Great Blue Heron	34	11	14	26	85
Green-backed Heron	5	3	5	4	17
Black-crowned Night-Heron	1				1
Brant			300		300
Canada Goose	91	40	3	198	332
Wood Duck	28	3	14	36	81
Green-winged Teal		16			16
American Black Duck	24	39	20	20	103
Mallard	175	275	80	76	606
Black/Mallard hybrid			2		2
Northern Pintail	3	6		1	10
Blue-winged Teal	21	72	2	34	129
Northern Shoveler	5	24		1	30
Gadwall	3	10	13	13	26
American Wigeon	2	16		5	23
Ring-necked Duck				4	4
Greater Scaup		1	2		3
Lesser Scaup	1	2	2	1	6
Oldsquaw			1		1
Common Goldeneye			2		2
Hooded Merganser			1	15	16
Common Merganser	4		3	2	9
Ruddy Duck		3			3
Turkey Vulture		5	22	9	36
Osprey	1	1	1	4	7
Northern Harrier	2	10	5	14	31
Sharp-shinned Hawk	1	1	1	2	5
Cooper's Hawk				2	2
Northern Goshawk	1		1		2
Accipter sp.	1	1			2
Red-shouldered Hawk	2		1	8	11
Broad-winged Hawk	1		1	7	9
Red-tailed Hawk	10	12	4	4	30
American Kestrel	11	14	28	18	71
Gray Partridge	11	4			15
Ruffed Grouse		3	13	26	42

Species	SW	SE	NW	NE	Total
Virginia Rail	3	4		7	14
Sora	5	1		3	9
Common Moorhen	4	7		32	43
American Coot		6		6	12
Black-bellied Plover	6	8	7		21
Semipalmated Plover	5	25	1	21	52
Killdeer	94	110	78	112	394
Greater Yellowlegs	1				1
Spotted Sandpiper	48	19	48	47	162
Upland Sandpiper	5	11	3	4	23
Ruddy Turnstone			1		1
Semipalmated Sandpiper	47	75	31	10	163
Least Sandpiper	7	230	1	15	253
White-rumped Sandpiper	8	8			16
Pectoral Sandpiper		2			2
Dunlin	2	35			37
Common Snipe	28	28	47	37	140
American Woodcock	1	8	19	5	33
Wilson's Phalarope		15			15
Bonaparte's Gull			1	1	2
Ring-billed Gull	1,398	176	2,156	165	*2,895
Herring Gull	301		83	25	409
Glaucous Gull	1				1
Great Black-backed Gull	1	1	7		9
Common Tern	5	1	8		14
Black Tern	11	5	1	55	72
Tern sp.	1				1
Rock Dove	86	245	121	125	577
Mourning Dove	78	123	70	38	309
Black-billed Cuckoo	9	5	4	2	20
Eastern Screech-Owl	1		2		3
Great Horned Owl	7	4	3	1	15
Barred Owl	2		3		5
Long-eared Owl		1			1
Northern Saw-whet Owl				1	1
Common Nighthawk	9		4	1	14
Whip-poor-will	11	4	28	2	45
Chimney Swift	10	12	22	23	67
Ruby-throated Hummingbird	23	16	18	17	74
Belted Kingfisher	13	5	20	6	44

* *Numbers do not add up to total given because the same birds were observed by different sections.*

Species	SW	SE	NW	NE	Total
Red-headed Woodpecker		2	2	1	5
Yellow-bellied Sapsucker	4		13	14	31
Downy Woodpecker	16	9	11	7	43
Hairy Woodpecker	8	5	11	11	35
Black-backed Woodpecker			1		1
Northern Flicker	43	39	54	31	167
Pileated Woodpecker	6	1	9	3	19
Olive-sided Flycatcher	4		3	3	10
Eastern Wood-Pewee	65	25	39	25	154
Alder Flycatcher	27	42	50	68	187
Willow Flycatcher	3	16	3	8	30
Least Flycatcher	43	34	71	76	224
Eastern Phoebe	20	14	71	29	134
Great Crested Flycatcher	110	54	118	63	345
Eastern Kingbird	129	136	239	101	605
Horned Lark	1	61	4	5	71
Purple Martin	92	25	45	36	198
Tree Swallow	320	290	332	359	1,301
N. Rough-winged Swallow	17	16	15	37	85
Bank Swallow	70	269	1,016	166	1,521
Cliff Swallow	41	3	138	207	389
Barn Swallow	204	190	361	276	1,031
Blue Jay	100	79	61	97	337
American Crow	151	157	293	223	824
Common Raven	2		12	8	22
Black-capped Chickadee	75	65	94	94	328
Red-breasted Nuthatch	5	2	12	15	34
White-breasted Nuthatch	8	6	4	17	35
Brown Creeper	4		2	3	9
House Wren	28	10	4	12	54
Winter Wren	3	5	8	12	28
Sedge Wren	4				4
Marsh Wren	4	4		23	31
Golden-crowned Kinglet		5	4	21	30
Ruby-crowned Kinglet			2	7	9
Blue-gray Gnatcatcher			1		1
Eastern Bluebird	7	2	6	20	35
Veery	96	53	95	99	343
Gray-cheeked Thrush		4			4
Swainson's Thrush	1		3	3	7
Hermit Thrush		5	9	15	29
Wood Thrush	19	9	59	25	112
American Robin	405	251	302	264	1,222

Species	SW	SE	NW	NE	Total
Gray Catbird	59	39	27	33	158
Brown Thrasher	15	5	10	7	37
Cedar Waxwing	421	158	277	155	1,011
European Starling	486	576	397	515	1,974
Solitary Vireo	1		1	4	6
Yellow Vireo			1	1	2
Warbling Vireo	71	77	78	62	288
Philadelphia Vireo	1	1	2	6	10
Red-eyed Vireo	65	49	132	113	359
Golden-winged Warbler	1		7	4	12
Tennessee Warbler				4	4
Nashville Warbler	10	11	32	37	90
Northern Parula			1	2	3
Yellow Warbler	223	100	283	151	757
Chestnut-sided Warbler	29	19	99	69	216
Magnolia Warbler		9	6	17	32
Cape May Warbler			1	1	2
Black-thr. Blue Warbler			5	11	16
Yellow-rumped Warbler	2	4	11	28	45
Black-thr. Green Warbler	6	1	19	45	71
Blackburnian Warbler	1	3	13	31	48
Pine Warbler	3	2	7	10	22
Bay-breasted Warbler				3	3
Blackpoll Warbler	5	9	4	10	28
Black & White Warbler	94	17	32	43	186
American Redstart	18	7	125	96	246
Ovenbird	113	38	134	105	390
Northern Waterthrush	11	1	12	13	37
Mourning Warbler	18	23	8	37	86
Common Yellowthroat	173	165	236	106	680
Wilson's Warbler			1	1	2
Canada Warbler	1	3	4	25	33
Scarlet Tanager	8	15	10	13	46
Northern Cardinal	3	4	5		12
Rose-breasted Grosbeak	72	59	125	73	329
Indigo Bunting	13	12	27	33	85
Rufous-sided Towhee	2				2
Chipping Sparrow	85	119	158	142	504
Clay-colored Sparrow		9			9
Field Sparrow	15	2	8	3	28
Vesper Sparrow	4	11	11	5	31
Savannah Sparrow	89	388	159	124	760
Grasshopper Sparrow	1	37	1		39
Song Sparrow	220	208	149	169	746
Swamp Sparrow	49	87	35	76	247

Species	SW	SE	NW	NE	Total
White-throated Sparrow	50	52	62	146	310
Dark-eyed Junco			1		1
Bobolink	152	874	380	364	1,770
Red-winged Blackbird	773	1,370	559	789	3,491
Eastern Meadowlark	69	75	88	62	294
Yellow-headed Blackbird		1			1
Common Grackle	358	271	152	121	902
Brown-headed Cowbird	183	228	117	139	667
Northern Oriole	121	92	89	49	351
Purple Finch	8	1	5	17	31
House Finch	26	10	3	1	40
Red Crossbill	14	31			45
White-winged Crossbill				1	1
Pine Siskin	1	2	2	3	8
American Goldfinch	158	152	296	217	823
Evening Grosbeak	2		18	40	60
House Sparrow	97	185	77	131	490
Total Species	144	140	151	150	183

Most birders tried to conserve energy during the Spring Roundup's mid-day heat. Even this Bobolink restricted its display to this roadside perch. Photograph by Tony Beck. ¤

Mink Frogs in Lanark County, Ontario

Louis L'Arrivée

The three most aquatic *Rana* species in the Ottawa District are the Mink Frog (*Rana septentrionalis*), the Green Frog (*R. clamitans*) and the Bullfrog (*R. catesbeiana*) (Cook 1981). The smallest and most commonly overlooked is the Mink Frog. Cook (1969) pointed out that this was one of a group of "secondary species" common in some areas but for which known records to date indicate discontinuous distribution within our region. It is locally abundant in the upper Gatineau and in the Ottawa Valley west of the Rideau River (Cook 1981).

The discontinuous distribution is evident in the map of Mink Frog distribution (Cook 1981: 92), where only four records in the Regional Municipality of Ottawa-Carleton are plotted. This apparent scarcity of Mink Frogs in Ottawa-Carleton may be due to the waryness of the species, but the higher frequency of records to the west in Lanark County suggests a lack of optimum habitat in Ottawa-Carleton. Here, I describe optimum habitats as well as note the species of amphibians and reptiles which co-exist with Mink Frogs.

HABITATS

During the summers of 1986 and 1987, I inventoried and evaluated 23 wetlands (see Figure 1) in Lanark County for the Ontario Ministry of Natural Resources using the methods described in *An Evaluation System for Wetlands of Ontario*, (Ontario Ministry of Natural Resources and Environment Canada 1984). During these field surveys, I compiled a record of habitats where Mink Frogs were found and also noted the presence of other amphibians and reptiles. All 23 wetlands contained swamp and marsh vegetation. Two also contained bog vegetation, and another two had fen vegetation besides the swamp and marsh types. Mink Frogs were observed in 10 wetlands (Figure 1) in marsh and/or swamp vegetation. Of 21 individual observations of this species, seven were in creeks, four in natural or beaver ponds, seven in swamps, two in lakeside habitats, and one in a wet meadow. (For detailed information on sightings, please contact the author.)

Table 1 shows the relative frequency of dominant vegetation in each of these habitats. All creek habitats were characterized by slow-flowing channels, due to the presence on one to nine beaver dams, and were choked with Yellow Pond Lilies (*Nuphar variegatum*) and Common Bladderwort (*Utricularia vulgaris*). Also, they often contained Coontail (*Ceratophyllum demersum*), pondweeds (*Potamogeton* spp.) and Frog's-bit (*Hydrocharis morsus-*

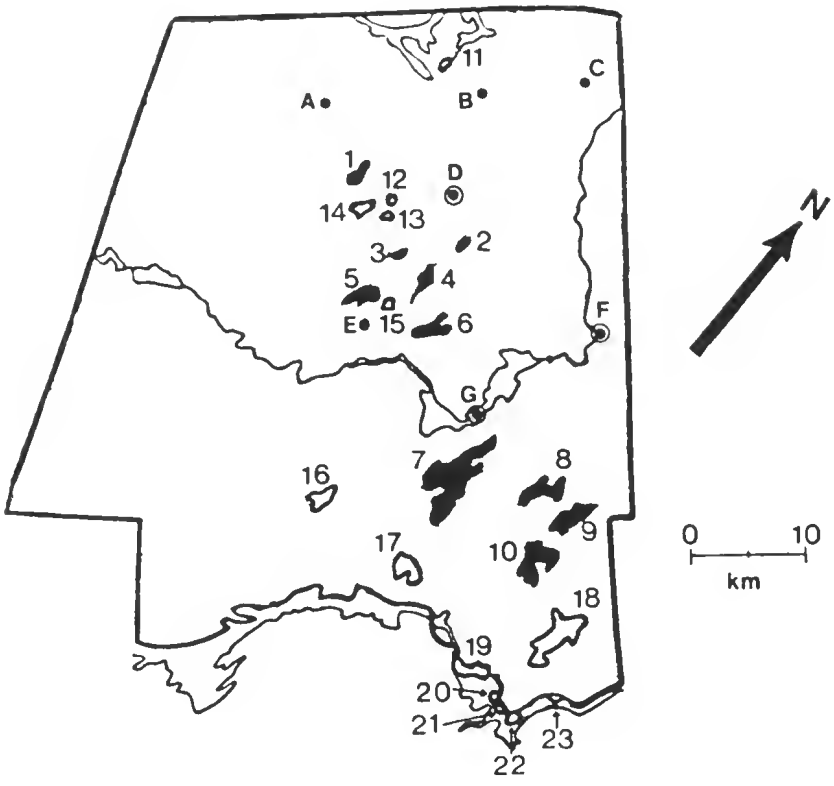


Figure 1. Wetlands inventoried and collection sites of Mink Frogs in Lanark County. Numbered polygons are wetlands which were inventoried during the summers of 1986 and 1987; shaded polygons are wetlands where Mink Frogs were sighted; open polygons are wetlands where they were not observed. Lettered dots show collection sites of National Museum of Natural Sciences specimens (one specimen was also collected in wetland number 4). Circled dots represent approximate locations.

1. *Bow Lake*
2. *Quig Lake*
3. *Harding Lake*
4. *Shea's Creek*
5. *Gillies Lake*
6. *Campbell's Creek*
7. *Black Creek*
8. *Franktown Swamp*
9. *North Mud Lake*
10. *North Montague Swamp*
11. *Lowney Lake*
12. *Reid Lake*
13. *Samuel and Craig Lakes*
14. *Mackay Lake*
15. *Ramsbottom Lake*
16. *Perth Long Swamp*
17. *Port Elmsley No. 2*
18. *South Montague Swamp*
19. *Rideau River Wetland - Part 1*
20. *Rideau River Wetland - Part 2*
21. *Rideau River Wetland - Part 3*
22. *Rideau River Wetland - Part 4*
23. *Merrickville Marsh*

ranae). In five cases, the creek was bordered on both sides by a band of marsh vegetation consisting of sedges (*Carex* spp.) and grasses (*Glyceria* spp., *Leersia oryzoides*, *Phalaris arundinacea*). Dead coniferous trees and stumps or Sweet Gale (*Myrica gale*) and Purple Loosestrife (*Lythrum salicaria*) also occurred in association with the sedges and grasses or with just grasses.

The most common plants in ponds were bur-reeds (*Sparganium* spp.), pondweeds, Coontail and Common Bladderwort. Cattails (*Typha* spp.) and grasses were the most common edge species.

Three of the four pond habitats were beaver flooded and part of or associated with a creek. They thus exhibited flow similar to that of the slow flowing creeks. All creeks ranged from two to 50 metres in width, while ponds were 50 metres or greater in width. Due to this functional connection between the two types, I have pooled pond and creek as one habitat type. As shown in Table 1, over half of creek and pond types (11 altogether) contained Yellow Pond Lilies, Common Bladderwort, Coontail, pondweeds and bur-reeds. In all cases, marsh or swamp vegetation occurred at the edges. Dead trees and stumps (coniferous or deciduous), cattails, grasses and Purple Loosestrife were found at the edge in over half of these habitats.

All swamp habitats contained dead coniferous trees and stumps. The most common secondary species were grasses, then sedges. The most common edge species were grasses.

Species common to both lakeside habitats were cattails and grasses. It was at one of these areas, Quig Lake, that I heard the distinctive "cut-cut-cut" or "took-took-took" calls of the Mink Frog on August 1st, 1986 (see Table 2). Although I had observed this species from June to August 1986 and July to August 1987 (in both Lanark County and the Regional Municipality of Ottawa-Carleton), this is the one time I heard them calling. This lack of vocalization probably can be correlated to the timing of field surveys. All surveys were conducted between 9 a.m. and 4 p.m. Although Cook (1981) states that this species breeds in late May and June in the Ottawa District, subsequent field data from his study area in Grenville County, just south of the Ottawa District and to the southeast of Lanark County, has recorded earliest and latest calling dates as June 9th (1982) and August 13th (1987) (F.R. Cook, personal communication). F.R. Cook (personal communication) has noted that calling often occurs in the evening and often the most intensive calling periods seem to occur just before dawn. In Gatineau Park (Ottawa District), McMurray (1984) noted that calling was most frequently heard around 2 a.m. and sometimes in the early morning around 6 a.m.

As shown in Table 1, the one wet meadow site (North Mud Lake Wetland) contained Muskgrass (*Chara* spp.), grasses, sedges and Lesser Bladderwort (*Utricularia minor*). If the wet meadow,

TABLE 1. VEGETATION OF MINK FROG HABITAT IN 10 WETLANDS IN LANARK COUNTY

Numbers indicate number of habitats in which the species was dominant (25% or more of area was occupied by species). Numbers in parentheses show number of habitats inventoried.

Dominant Species	Creek (7)	Pond (4)	Lake-side (2)	Wet Meadow (1)	Swamp (7)
Dead coniferous trees & stumps			1		7
Dead deciduous trees & stumps					1
Dead shrubs					1
Filamentous algae	1				
Chara spp.	1			1	
Equisetum spp.					1
Larix laricina					1
Thuja occidentalis					2
Typha spp.		1	2		2
Sparganium spp.	3	3	1		1
Najas flexilis			1		
Potamogeton foliosus	1	2			
P. natans	4	1			
P. zosteriformis	2				
Potamogeton spp.					1
Sagittaria spp.	2	1			
Hydrocharis morsus-ranae	3				
Glyceria spp.		1	2	1	4
Leersia oryzoides		1	2		4
Phalaris arundinacea		1	2	1	4
Zizania aquatica			1		
Carex spp.				1	3
Eleocharis spp.					2
Lemna spp.		1			
Spirodela polyrhiza		1			
Wolffia spp.	2				
Salix spp.					2
Myrica gale			1		
Alnus rugosa					2
Ceratophyllum demersum	5	3			
Nuphar variegatum	7	2			
Nymphaea spp.				1	
Acer saccharinum					1
Lythrum salicaria					2
Myriophyllum spp.	2				
Cornus stolonifera					2
Fraxinus nigra					1
Utricularia vulgaris	7	3			2
Utricularia minor				1	

Edge Species	Creek (7)	Pond (4)	Lake-side (2)	Wet Meadow (1)	Swamp (7)
Dead coniferous trees & stumps	4	2	1	1	2
Dead deciduous trees & stumps	1	1			2
Dead shrubs	1				1
Larix laricina		1	1		1
Thuja occidentalis		1			2
Typha spp.	2	4		1	1
Sparganium spp.	1			1	
Hydrocharis morsus-ranae		1			
Glyceria spp.	6	3	1	1	4
Leersia oryzoides	7	3			
Phalaris arundinacea	7	3	1	1	4
Carex spp.	5		1	1	3
Eleocharis spp.		1		1	
Salix spp.	1	1			
Myrica gale	4		1		
Alnus rugosa		1	1		1
Nuphar variegatum	1				
Acer saccharinum					1
Lythrum salicaria	5	2			
Cornus stolonifera			1		
Fraxinus nigra		1			3
Eupatorium maculatum	1				
"Upland" (Not part of Wetland)			1		3

lakeside and swamp habitats are combined, one will note that sedges and grasses were major edge species in at least half of the 10 habitats. When all habitats are considered, there seems to be a predominance of grasses, sedges and dead trees and stumps as occurring within the habitat or at its edges. Such an association is probably important for breeding. McMurray (1984) showed that Mink Frogs in Gatineau Park were breeding amongst the branches of woody vegetation in deepwater areas which were also characterized by an abundance of the floating plant, Water-shield (*Brasenia schreberi*), and "cluttered with sedges". He suggested that the lack of such suitable habitat probably excluded this species from the southern areas of the park. Hedeen (1972a), working in Minnesota, noted a Mink Frog egg mass encircling a *Sparganium* leaf below the water's surface in a one-hectare lake with a surrounding sedge mat dominated by *Carex lasiocarpa*.

Of the 13 wetlands where I did not observe Mink Frogs (Figure 1), only four contained vegetation communities similar to the ones mentioned above. Both Reid Lake and Mackay Lake showed lakeside communities with dead coniferous trees and stumps, and grasses and sedges as dominant species. The Samuel and Craig Lakes Wetland and South Montague Swamp contained creeks with Yellow Pond Lilies and pondweeds as well as two and four beaver ponds, respectively. In both cases, grasses, sedges and dead coniferous trees and stumps occurred at the edge. Common Bladderwort was not recorded as a dominant species in all four cases, and, except for South Montague Swamp, Coontail was not dominant in these communities. It is possible that Mink Frogs do occur here but were not observed during field surveys.

Five of the 13 wetlands occurred along the Rideau River. Although these wetlands contained communities with floating (usually *Nymphaea* spp.) and submergent vegetation, it appears that Mink Frogs do not favour areas with faster-flowing waters and/or without vegetation communities dominated by dead trees, stumps, grasses and sedges.

Although Mink Frogs occurred in swamp habitat in the Campbell's Creek Wetland (see Figure 1 and Table 2), I did not observe them in Campbell's Creek itself. This creek had one beaver dam and showed a dominance of Common Bladderwort, pondweeds and Coontail. Although Yellow Pond Lily was present, it did not dominate. Dominant edge species were cattails, grasses, sedges and Water-willow (*Decodon verticillatus*). Again, dead trees and stumps were not present as a dominant form.

Figure 1 also shows sites where Mink Frogs have been documented by specimens in the National Museum of Natural Sciences collection. (For detailed information on these specimens, please contact the author.) Besides Shea's Creek, none of these sites were in the 23 wetlands that I inventoried. Habitats recorded were one creek (site B), two beaver ponds (A and D),

TABLE 2. NUMBER OF MINK FROGS OBSERVED IN LANARK COUNTY AS A FUNCTION OF SEASONAL CHRONOLOGY

PART A. In 10 Wetlands (see Figure 1 for locations)

Date	Creek & Pond	Lakeside	Wet Meadow	Swamp	Wetland Name
17 July 1987	2				Black Creek
21 July 1987	2				Black Creek
1 Aug. 1986		4-5			Quig Lake
4 Aug. 1986	2				North Montague Swamp
5 Aug. 1987	3-6 (2 transforming)				North Montague Swamp
7 Aug. 1987				2 (1 transforming)	North Montague Swamp
13 Aug. 1986	100+				Bow Lake
13 Aug. 1987	100+				Franktown Swamp
14 Aug. 1987				2	Franktown Swamp
14 Aug. 1986	4				Gillies Lake
18 Aug. 1986				several	Gillies Lake
19 Aug. 1986				15	Harding Lake
20 Aug. 1986	200+				Shea's Creek
21 Aug. 1986	1				Shea's Creek
22 Aug. 1986				1	Campbell's Creek
25 Aug. 1986	50+	10+			North Mud Lake
26 Aug. 1986			10+	2-3	North Mud Lake
27 Aug. 1986				2	North Mud Lake

PART B. At Seven Collection Sites (see Figure 1 for locations)

Date	Collection(s)	Habitat	Site
20 Apr. 1985	6 adults	Creek & Pond	B
12 May 1973	3	No data	F
15 May 1954	1 adult & 1 juvenile	No data	G
25 May 1954	2 adults & 1 juvenile	Lakeside	G
1 June 1986	1 adult	Creek & Pond	A
6 July 1986	"several" incl. 2 adults	Creek & Pond	E
15 July 1984	1 adult & 1 other	Swamp	C
25 Oct. 1975	Many (especially tadpoles)	Creek & Pond	D

one gravel pit pond (E), grassy margins of a large beaver swamp (C), and one lakeside habitat (G). There was no habitat data for site F.

The creek habitat where frogs were collected on April 20th, 1985, had slow to medium flow, and sedges and cattails at the edge. Pond lilies, pondweeds, bladderwort and Coontail would not be evident this early in the year. The two beaver ponds contained submergent, floating and emergent vegetation. Species described were cattails, "lily pads", and "spikey water grasses" (probably bur-reeds or Spike Rush (*Eleocharis* spp.)). The gravel pit pond contained submerged weeds, "lily pads", and cattails. Sedges, Water Milfoil (*Myriophyllum* spp.) and some cattails were observed in the grassy area of the beaver swamp. Water flow was slow in the swamps and ponds. Frogs were found in grasses and weeds in shallow water near the water's edge in the swamp and one of the beaver ponds. The lakeside habitat (Mississippi Lake) was described as "swampy bush-rush shore of lake".

All habitats are similar to the ones I encountered. Ponds and creeks accounted for over half of my observations, while these types occurred at four of the six collection sites mentioned above. Again, due to the presence of flow in the ponds (the gravel pit pond was part of Lacey Creek), I shall consider ponds and creeks as one habitat type. This habitat thus showed a preponderance of pond lilies and submerged vegetation, had very little flow and usually was characterized by one or more beaver dams.

RELATIVE NUMBERS

Table 2 shows the number of Mink Frogs observed in each of the 21 habitats (in the 10 wetlands) as a function of seasonal chronology. The largest numbers were observed in creek and pond habitats between August 13th and 25th. I observed 50+ and 100+ frogs on the following dates: August 13th, 20th and 25th, 1986, and August 13th, 1987. The four creeks with large numbers of frogs were located in the Shea's Creek, Bow Lake, North Mud Lake, and Franktown Swamp wetlands. One pond with 100+ Mink Frogs was also located in the Shea's Creek Wetland.

It is possible that many of these frogs were juveniles as transforming individuals were observed on August 5th and 7th, 1987 in pond and swamp habitats in North Montague Swamp. In the Itasca region of Minnesota, newly metamorphosed Mink Frogs appeared from July until late August (Hedeen 1972a). Tadpoles of this species overwinter and transform one year after hatching (Cook 1984, Hedeen 1971, 1972a). Hedeen (1971) showed that metamorphosis occurs at body lengths ranging from 33 to 42 mm.

I collected one frog from Shea's Creek on August 20th,

1986, and deposited it in the National Museum of Natural Sciences (NMC 28726). It had a snout-vent length of 44.37 mm. In Minnesota, Hedeen (1972a) showed that male Mink Frogs became sexually mature at about 45-50 mm snout-vent length, one year after transforming, while females became sexually mature at about 54-59 mm in length, either one or two years after transformation. He also showed that tympanum diameter was sexually dimorphic in frogs with a snout-vent length of 48 mm or greater. McMurray (1984), working in Gatineau Park, also concluded that tympanum diameter was sexually dimorphic in specimens greater than 48 mm in length. In view of the similarity of these findings from two different areas separated by more than a thousand kilometres, it is not unreasonable to assume that the frog I collected at Shea's Creek was either a newly-metamorphosed individual (see above paragraph) or a subadult on the verge of becoming sexually mature. I recall that it was one of the larger individuals amongst the 100+ individuals observed on that date. This lends further credence to the suggestion that the large numbers of frogs observed at Shea's Creek as well as the three other wetlands mentioned above represented a "population explosion" of newly-metamorphosed individuals.

Table 2 also shows collection dates of specimens in the National Museum of Natural Sciences collection. Earliest and latest dates for observing and collecting Mink Frogs in Lanark County were April 20th (1985) and October 25th (1975).

INTERACTION WITH OTHER SPECIES

There appears to be a relationship between Beaver and Mink Frogs as all creek habitats contained beaver dams and many of the ponds and swamps as well as the wet meadow were beaver flooded. However, Beaver or their sign were also observed in all 13 wetlands where Mink Frogs were not observed.

Amphibians and reptiles co-existing with Mink Frogs included Green Frogs, Bullfrogs, Leopard Frogs (*Rana pipiens*), Wood Frogs (*R. sylvatica*), Midland Painted Turtles (*Chrysemys picta marginata*), Snapping Turtles (*Chelydra serpentina*), Eastern Garter Snakes (*Thamnophis sirtalis sirtalis*), and Northern Water Snakes (*Nerodia sipedon sipedon*). As shown in Table 3, Mink Frogs were most commonly associated with Green Frogs (67% of observations), Midland Painted Turtles (33% of observations), Leopard Frogs (29%), and Bullfrogs (24%). However, Green Frogs, Painted Turtles, Leopard Frogs and Bullfrogs were observed in 10, 9, 4 and 6, respectively, of the 13 wetlands where Mink Frogs were not seen. Also, Cook (1981) shows more collection sites for these four species in the Ottawa District than for the Mink Frog. As mentioned previously, this may be due to the narrower habitat requirement of the Mink Frog.

Table 3 also shows amphibians and reptiles co-existing with

Mink Frogs at National Museum of Natural Sciences collection sites. Bullfrogs were collected in five and Green Frogs in four of the seven collection sites. Bullfrogs and Mink Frogs always occurred in wetlands where Green Frogs were observed, while Bullfrogs were observed in four of the 10 "Mink Frog" wetlands. The close association shown by these three species may be due to the ecological niche that each one occupies. Stewart and Sandison (1972) reported that in the Adirondack Mountains of New York, the Mink Frog inhabits mostly the aquatic zone, either submerged or sitting on lily pads and other floating vegetation, the Green Frog is found primarily along water margins and rarely moves into the aquatic zone but often into the terrestrial zone, and the Bullfrog occurs primarily along water margins but will sometimes occur in the aquatic zone. All three species showed dietary overlap, but each one used different organisms as major food items. Mink Frogs "preferred" diving and whirlygig beetles (Coleoptera), water striders (Hemiptera) and aphids (Homoptera) inhabiting lily pads. Green Frogs "preferred" terrestrial coleoptera and hemiptera, and Bullfrogs "preferred" *Rana* species. Kramek (1972) examined Mink Frog stomachs and showed that aphids were consumed most often and in greatest volume while chrysomelid coleoptera were the second most common prey species. These frogs were also from the Adirondack Mountains.

Stewart and Sandison (1972) could not identify species of *Rana* from stomach contents of Bullfrogs. However, captive Bullfrogs ate both Green Frogs and Mink Frogs. Scheuler (1975) also gives evidence to show that Bullfrogs will prey on both species. Assuming that predation does occur, Moore (1952) suggested that Bullfrogs may, in fact, be restricting the southern distribution of Mink Frogs.

The Green Frog may also predate on Mink Frogs. Moore (1952) mentioned observations of large Green Frogs eating Mink Frogs, while Hedeen (1972b) showed that captive Green Frogs will prey on metamorphosing tadpoles of Mink Frogs.

The Snapping Turtle might be another important predator of Mink Frogs. Snapping Turtles were observed in Shea's Creek, Franktown Swamp and the Black Creek Wetland, all "Mink Frog" wetlands (see Table 3). Except for the Black Creek Wetland, the turtle was seen in creeks where the Mink Frog population numbered 100+. Also, a dead Snapping Turtle (NMC 26363) was collected in a creek at one of the National Museum of Natural Sciences collection sites (see Tables 2 and 3). Although this species probably occurred in wetlands where it was not observed, especially along the Rideau River and in lakes associated with wetlands surveyed, the fact that I observed them in creeks with high Mink Frog numbers might indicate a higher that normal density of Snapping Turtles in these areas. This would have to be verified by a quantitative study. Cook (1984) states that Snapping Turtles eat fish, frogs, birds and mammals as well as plant food.

TABLE 3. NUMBER OF AMPHIBIANS AND REPTILES OBSERVED IN MINK FROG HABITATS IN LANARK COUNTY

PART A. In 10 Wetlands (see Figure 1 for locations)

Date	Mink Frog	Green Frog	Bull-frog	Leopard Frog	Wood Frog	Painted Turtle	Snapping Turtle	Water Snake	Garter Snake	Wetland Number
17 July 1987	2	several				2				7
21 July 1987	2	several		1						7
1 Aug. 1986	4-5	2				1				2
4 Aug. 1987	2			1						10
5 Aug. 1987	3-6			several					1	10
7 Aug. 1987	2	several		2						10
13 Aug. 1986	100+	100+	3			10				1
13 Aug. 1987	100+						1			8
14 Aug. 1987	2				1					8
14 Aug. 1986	4	4	2			1		2		5
18 Aug. 1986	several	several		several	several					5
19 Aug. 1986	15	1	1	1	1					3
20 Aug. 1986	200+	2	10			1	1			4
21 Aug. 1986	1									4
22 Aug. 1986	1	several				1				6
25 Aug. 1986	60+	15+				1				9
26 Aug. 1986	12+	1								9
27 Aug. 1986	2	2								9

PART B. At Seven Collection Sites (see Figure 1 for locations)

Date	Mink Frog	Green Frog	Bullfrog	Leopard Frog	Snapping Turtle	Blue-spotted* Salamander	Site
20 Apr. 1985	6 a.	14 a.	2 j., 1 t.		1 a. (dead)	1 a.	8
12 May 1973**	3						F
15 May 1954**	1 a., 1 j.						
25 May 1954	2 a., 1 j.	11 a.	3 a.	9 a.			G
1 June 1986	1 a.		1				A
6 July 1986	several	a 1 t.	3 j., 1 t.				E
15 July 1984	1 a., 1 ?	1 a., 29 j.					C
25 Oct. 1975	many (esp. t.)		1				D

* *Ambystoma laterale* ** Field data could not be located. a = adult, j = juvenile, t = tadpole.

Hedeen (1972b) has shown that Great Blue Herons, water bugs (*Lethocerus americanus*) and leeches (*Macrobdella decora*) will prey on tadpoles or adults of the Mink Frog. Other suggested predators are Raccoon, Five-spined Stickleback (*Culaea inconstans*), Garter Snake (Hedeen 1972b) and Water Snake (Scheuler 1975). I observed Great Blue Herons and Racoon sign in almost all 23 wetlands. Five-spined Sticklebacks and leeches (Hirudinea) were also not uncommon in many wetlands. Although Garter Snakes were observed in "Mink Frog" wetlands, only one dead individual was seen in a Mink Frog habitat (Table 3). However, Garter Snakes were also common in upland areas. Cook (1984) states that it occurs in a variety of habitats but also frequents the edges of marshes, rivers, ponds, and so forth. I observed Water Snakes in only one wetland, Gillies Lake (Table 3). They occurred in the lake and the creek where Mink Frogs also existed. According to Cook (1981), Northern Water Snakes may be found in the shallows and edges of rivers, streams, bogs and lakes.

CONCLUSIONS

Mink Frogs appear to be much more site specific than Green Frogs, Bullfrogs, Leopard Frogs or Midland Painted Turtles, preferring slow-flowing creek or pond habitats, usually dammed by Beaver, and containing thick concentrations of pond lilies, bladderwort, Coontail and pondweeds. Edge vegetation consisting of sedges, grasses and dead trees and stumps appears to be a necessary habitat requirement and important for breeding. These habitats are much more common in Lanark County than in the Regional Municipality of Ottawa-Carleton and this probably accounts for the difference in distribution of this species between the two areas. During the month of August (1986 and 1987), 50+ and 100+ Mink Frogs were observed in each of four different creek habitats. A significant number of these frogs may have been represented by newly-metamorphosed individuals.

Green Frogs and Midland Painted Turtles were most often associated with observations of Mink Frogs. The Bullfrog may be an important predator of the Mink Frog. A few observations of the Snapping Turtle in areas of dense Mink Frog populations suggest that it may be another important predator or that it may favour some characteristic of these habitats.

Acknowledgements

I thank Harry McLeod, District Biologist, Ontario Ministry of Natural Resources, for providing me with the opportunity to inventory wetlands in Lanark County, and Bruce Brown, who participated in all field surveys. I especially thank Bruce for his excellent "frog-catching" abilities. I also thank F.R. Cook and R.M. Rankin for providing information on collecting sites in

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Literature Cited

Cook, F.R. 1969. Letter to the editor. Trail & Landscape 3(2): 45-49.

Cook, F.R. 1981. Amphibians and reptiles of the Ottawa District. Revised edition. Trail & Landscape 15(2): 75-107.

Cook, F.R. 1984. Introduction to Canadian amphibians and reptiles. National Museums of Canada, Ottawa. 200 pp.

Hedeen, S.E. 1971. Growth of tadpoles of the Mink Frog, *Rana septentrionalis*. Herpetologica 27(2): 160-165.

Hedeen, S.E. 1972a. Postmetamorphic growth and reproduction of the Mink Frog, *Rana septentrionalis* Baird. Copeia 1972(1): 169-175.

Hedeen, S.E. 1972b. Escape behavior and causes of death of the Mink Frog, *Rana septentrionalis*. Herpetologica 28(3): 261-262.

Kramek, W.C. 1972. Food of the frog *Rana septentrionalis* in New York. Copeia 1972(2): 390-392.

Moore, J.A. 1952. An analytical study of the geographic distribution of *Rana septentrionalis*. American Naturalist 86(826): 5-22.

Ontario Ministry of Natural Resources and Environment Canada. 1984. An evaluation system for wetlands of Ontario south of the Precambrian Shield. Second edition. 169 pp.

Scheuler, F.W. 1975. Geographic variation in the size of *Rana septentrionalis* in Quebec, Ontario and Manitoba. Journal of Herpetology 9(2): 177-185.

Stewart, M.M. and P. Sandison. 1972. Comparative food habits of sympatric Mink Frogs, Bullfrogs and Green Frogs. Journal of Herpetology 6(3-4): 241-244.

NOTE: For more detailed information on observations and collections of Mink Frogs in Lanark County, please contact the author at the following address: 1102 - 2220 Halifax Drive, Ottawa, Ontario K1G 2W7, or telephone (613) 526-1463. ¤

University of Ottawa Spring Courses

WONDERS OF THE INSECT WORLD

Discover the incredible variety and beauty of insects, more of them beneficial than harmful! You will learn how to distinguish major groups, and where and when to look for them, in the woods or in your own garden.

We shall provide you plenty of insect specimens, microscopes and identification keys teaching how to use them successfully and, if you wish, how to prepare an insect collection of your own.

Lecturer: Dr. Fenja Brodo, Research Associate, National Museum of Natural Sciences;

Schedule: eight Wednesday sessions beginning April 26, 7:00-9:30 p.m.;

Fee: $150 plus suggested purchase of text, *A Field Guide to the Insects* by D.J. Borror and R.E. White.

Optional Field Trips - weather permitting.

AMONG THE WILDFLOWERS

Spring is the perfect time to learn about the flowers that bloom in the National Capital Region.

An evening lecture will be followed by three field trips to various wayside habitats. Learn to identify the colourful spring flowers and enjoy their variety and beauty.

Handouts will provide identification information and references to wildflower guides.

Instructor: Catherine J. Keddy, M.Sc., ecological consultant;

Schedule: Lecture: Friday, May 12, 7-9 p.m.
Field Trips: Sundays, May 14 and 28, and June 4, 10 a.m.-4 p.m.;

Fee: $85.

Class sizes are limited; please register early. To obtain further information and to register, contact the Continuing Education Office, University of Ottawa, 5 Calixa Lavallée St., (one block south of Laurier St. East), Ottawa; telephone 564-4263.

Coming Events

arranged by the Excursions and Lectures Committee
For further information, call the Club number (722-3050).

Times stated for excursions are departure times. Please arrive earlier; leaders start promptly. If you need a ride, don't hesitate to ask the leader. Restricted trips will be open to non-members only after the indicated deadlines.

ALL OUTINGS: *Please bring a lunch on full-day trips and dress according to the weather forecast and the activity. Binoculars and/or spotting scopes are essential on all birding trips. Unless otherwise stated, transportation will be by car pool.*

REGISTERED BUS TRIPS: *Make your reservation for Club bus excursions by sending a cheque or money order (payable to The Ottawa Field-Naturalists' Club) to Ellaine Dickson, 2037 Honeywell Avenue, Ottawa K2A 0P7,* ***at least ten days in advance.*** *Include your name, address, telephone number and the name of the outing.*

EVENTS AT THE MUSEUM: *Club members must show their membership cards to gain access to the National Museum of Natural Sciences for Club functions after regular Museum hours. There is a charge for parking in the Museum lot.*

Tuesday 14 March 8:00 p.m.	OFNC MONTHLY MEETING POLAR BEAR PASS Speaker: Stewart MacDonald Meet: Auditorium, National Museum of Natural Sciences, Metcalfe and McLeod Streets. Stewart MacDonald's lifetime passion for Canada's Arctic and its indigenous wildlife is well known. He was responsible for the establishment of the High Arctic Research Station in Polar Bear Pass in 1968, and in the ensuing years he waged a determined campaign to ensure the preservation of this biological oasis against potential exploitation. His dedicated efforts were instrumental in the government's decision in 1986 to create an ecological reserve called the Polar Bear Pass National Wildlife Area. Stew is an Honorary Member of The Ottawa Field-Naturalists' Club and former Curator of Vertebrate Ethology at the National Museum of Natural Sciences. In addition to being an eminent scientist, he is also an excellent photographer.

Date and time to be decided

AMPHIBIANS IN SPRING
Leader: Stephen Darbyshire
The success of this outing is highly dependent on the weather. Those registering with the Club number (722-3050) before March 20th will be notified when final details have been determined. A strong flashlight, rubber boots and a dip net are highly recommended.

Sunday
2 April
6:30 a.m.
to
6:30 p.m.

BUS EXCURSION: SPRING BIRDING AT PRESQU'ILE
Leaders: Bob Bracken and Colin Gaskell
Meet: Sears, Carlingwood Shopping Centre, south side, Carling Avenue at Woodroffe Avenue.
Cost: $20.00 (See Registered Bus Trips for details.)
This is the Club's annual trip to observe the large flocks of waterfowl that pause to rest and feed in the waters surrounding the provincial park during the course of their northward migration.

Tuesday
11 April
8:00 p.m.

OFNC MONTHLY MEETING
WILDFLOWERS UP AND DOWN THE VALLEY
Speakers: Sheila and Harry Thomson
Meet: Auditorium, National Museum of Natural Sciences, Metcalfe and McLeod Streets.
Experience a preview of some of the hundreds of different wildflowers that will bloom in the Ottawa Valley this spring and summer. Harry's slides of wildflowers will be supplemented with comments by Sheila on distinctive or interesting features, tips on where and when to look for them, and something of their folklore and uses.

Saturday
15 April
2:00 a.m.
to
8:00 a.m.

EARLY MORNING OWLING
Leader: Ray Holland (225-9655)
Meet: Sears, Carlingwood Shopping Centre, south side, Carling Avenue at Woodroffe Avenue.
Participants will have an opportunity to identify the diagnostic calls of several species of owls as well as the nocturnal sounds of American Woodcock, Common Snipe and Ruffed Grouse. Telephone Ray if you wish to take part so he can notify you of any changes.

Sunday
23 April
6:30 a.m.
to
6:30 p.m.

BUS EXCURSION: HAWK MIGRATION AT DERBY HILL, N.Y.
Leaders: Bob Bracken and Bernie Ladouceur
Meet: Sears, Carlingwood Shopping Centre, south side, Carling Avenue at Woodroffe Avenue.
Cost: $20.00 (See Registered Bus Trips for details.)
When weather conditions are favourable, the spectacle of thousands of hawks migrating through Derby Hill is well worth the bus ride. Canadians should bring proof of citizenship, and non-Canadians should carry passports. Optical equipment in "new" condition should be registerd with Canada Customs in advance of the trip. The trip will be cancelled on the day before if the weather forecast for the eastern end of Lake Ontario is particularly unfavourable. You will be notified of any change of plan.

Friday
28 APRIL

OFNC SOIREE - WINE AND CHEESE PARTY
See the centrefold of the last issue for further details.

Sunday
30 April
9:00 a.m.

GENERAL BOTANY OUTING
Leader: Philip Martin
Meet: Sears, Carlingwood Shopping Centre, south side, Carling Avenue at Woodroffe Avenue.
This half-day outing will explore a local area to discover spring wildflowers, in bloom, we hope.

* * *

BIRD WALKS FOR BEGINNERS

The following series of walks (of three or four hours duration) is offered for novice birders.

Saturday	Time	Place	Leader	
6 May	7:30 a.m.	Britannia*	Roy John	(226-2019)
13 May	7:30 a.m.	V. Massey Park**	Jeff Harrison	(230-5968)
20 May	7:30 a.m.	Britannia*	Ray Holland	(225-9655)
27 May	7:30 a.m.	Britannia*	Wright Smith	(225-1811)

* *Entrance to the Britannia Filtration Plant; Bus #18 stops here*
** *Northwest corner of the parking lot near the Heron Road Bridge.*

MAY EVENING STROLLS

These four informal walks are offered to expand members' general knowledge of local natural history. Children are most welcome on these outings. Waterproof footwear is advisable.

Thursday 11 May, 6:30 p.m. — STONY SWAMP
Leader: Ellaine Dickson (722-3050 after 10 a.m.)
Meet: Lincoln Heights Galleria, northeast corner of parking lot, **Richmond Road and Assaly Road.**

Wednesday 17 May, 6:30 p.m. — BRITANNIA WOODS
Leader: Dan Brunton
Meet: Lincoln Heights Galleria (see above)

Thursday 25 May, 6:30 p.m. — SOUTH MARCH HIGHLANDS
Leader: Catherine O'Keefe
Meet: Lincoln Heights Galleria (see above)

Tuesday 30 May, 6:30 p.m. — SOUTH GLOUCESTER WOODS
Leader: Ewen Todd
Meet: Billings Bridge Shopping Centre, northeast corner.

* * *

Saturday & Sunday 6 & 7 May — DAWN CHORUS - TENT-OUT ON MOUNT ST. PATRICK IN RENFREW COUNTY
Leaders: Harry and Sheila Thomson (234-0845)
Be prepared to rise at 4 a.m. to hear the birdsong at dawn. To register, call the leaders by May 3rd.

Tuesday 9 May, 8:00 p.m. — OFNC MONTHLY MEETING
BIRDS IN FLORIDA
Speaker: Roy John
Meet: Auditorium, National Museum of Natural Sciences, Metcalfe and McLeod Streets.
Roy's talk and slides of Florida birds will be of particular interest to those who spend some time in Florida.

Thursday 18 May, 9:00 a.m. — MIDWEEK TRIP TO MARY STUART'S PROPERTY
Leader: Mary Stuart (820-5220)
Meet: Lincoln Heights Galleria, northeast corner of the parking lot on **Richmond and Assaly** Roads.
At the old farm near Pakenham, wildflowers and birds await those free to ramble on a spring day. Bring a lunch, a drink (there is no drinking water), waterproof footwear, insect repellent and binoculars. Call Mary the day before for last minute instructions.

Sunday
28 May
8:00 a.m.

MOTORCADE TOUR OF A BLUEBIRD TRAIL
Leader: Carson Thompson (1-267-5721)
Manager, Perth Wildlife Reserve
Meet: Sears, Carlingwood Shopping Centre, Carling Avenue at Woodroffe Avenue.

Participants will drive to the Perth Wildlife Reserve, signs for which can be picked up on the Rideau Ferry Road off Highway 43 between Perth and Smith's Falls. After following the Bluebird Trail, lunch (bring your own) will be at the Mill Pond Conservation Area, where Carson will discuss sugar bush management, examine a woodland improvement area and demonstrate how regeneration of a clearcut area can benefit wildlife.

Tuesday
13 June
8:00 p.m.

OFNC MONTHLY MEETING
BUTTERFLIES OF THE OTTAWA DISTRICT
Speaker: Peter Hall
Meet: Auditorium, National Museum of Natural Sciences, Metcalfe and McLeod Streets.

This slide-illustrated talk will give participants a butterfly's eye view of the Ottawa District, showing off the diversity of habitats in the area. Many butterfly species are highly localized, and Peter's talk will explain why they are and where they can be found. (See also July 9th outing.)

Saturday
17 June
9:00 a.m.

PURDON FEN
Leaders: Robina Bennett and Catherine O'Keefe
Meet: Lincoln Heights Galleria, northeast corner of parking lot at **Richmond and Assaly Roads.**

This is your opportunity to see thousands of Showy Lady's-slippers in full bloom. Other orchids may also be seen.

Sunday
18 June
8:30 a.m.

MOSSES AND LIVERWORTS IDENTIFICATION
Leader: Robert Ireland
Meet: Supreme Court Building, front entrance, Wellington Street.

This half-day trip to Luskville Falls should be most interesting to those of us who have spent our lives wondering what all the beautiful mosses are called. Bring a hand lens and pocket knife.

Dr. Ireland's book, *Syllogeus 62: Illustrated Guide to Some Hornworts, Liverworts and Mosses of Eastern Canada* is a useful introduction to the local species. For further information on this publication, see page 48 of this issue.

Sunday 25 June 9:00 a.m.

BOREAL WILDFLOWERS
Leader: Erich Haber
Meet: Elmvale Shopping Centre, northeast corner of parking lot, St. Laurent Blvd. and Smyth Road.

This half-day trip will be to the Pine Grove Trail on Davidson Road. This is a unique opportunity to learn about boreal wildflowers in our area.

Sunday 2 July 1:00 p.m.

FERN IDENTIFICATION TRIP
Leader: Bill Arthurs (225-6941)
Meet: Elmvale Shopping Centre, northeast corner of parking lot, St. Laurent Blvd. and Smyth Road.

This will be a general interest botanical walk along the New York Central right-of-way with a special emphasis on some of the local species of ferns.

Thursday 6 July 8:30 a.m.

OUTING TO BILL'S FARMLAND AT BURRITTS RAPIDS
Leader: Bill Gummer (596-1148)
Meet: Sears, Carlingwood Shopping Centre, Carling Avenue at Woodroffe Avenue.

This will be a general interest walk to see various species of birds and wildflowers. Pack a picnic lunch and binoculars for this leisurely trip.

Sunday 9 July 9:30 a.m.

BUTTERFLY HABITATS
Leader: Peter Hall (733-0698)
Meet: Neatby Building, front entrance, Central Experimental Farm, one block west of the Irving Place - Maple Lane Drive stoplight on Carling Avenue.

This all-day outing is a follow-up to the June monthly meeting that detailed the great variety of butterfly habitats in the Ottawa District. A number of these habitats will be visited, from wetlands to woodlands, to illustrate this diversity. Bring a lunch and a butterfly net if you have one.

Sunday 23 July 8:00 a.m. to 6:00 p.m.

BUS TRIP TO SHAW WOODS
Leader: Albert Dugal
Meet: Sears, Carlingwood Shopping Centre, Carling Avenue at Woodroffe Avenue.
Cost: $9.00

This unique and complex woods contains some of the tallest trees in Eastern Ontario, with an ancient cedar swamp and attractive trees in essentially virgin condition. Bring a lunch and insect repellent. Participants should register **at least ten days in advance** as directed under **Registered Bus Trips**.

Sunday 30 July 7:00 a.m.

BIRDING TOUR OF THE EASTERN SEWAGE LAGOONS

Leader: Bruce Di Labio (729-6267)

Meet: Elmvale Shopping Centre, northeast corner of parking lot, St. Laurent Blvd. and Smyth Road.

Participants will visit several sewage lagoons east of Ottawa to observe migrating shore birds and interesting species of breeding waterfowl. To register and learn further details, please telephone the leader.

* * *

NATIONAL WILDLIFE WEEK FESTIVAL

IN THE NATIONAL CAPITAL REGION

April 6th to 16th

- international wildlife film festival
- exhibits
- workshops
- nature tours
- prizes

Watch the local media for further information.

* * *

ST. LAWRENCE WILDFOWLERS ASSOCIATION

7TH ANNUAL WILDLIFE ART & CARVING SHOW

May 6th & 7th

Saturday: 12 noon - 9 p.m.
Sunday: 10 a.m. - 5 p.m.

Place: Granite Room, Brockville Country Club
King Street West (old Highway #2)
Brockville, Ontario

Admission: $2.00

DEADLINE: Material intended for the July - September issue must be in the Editor's hands before April 1 at the latest.

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